NATVRALL PHILOSOPHY:

OR

A DESCRIPTION OF THE WORLD, AND OF the ſeverall Creatures therein contained:

Viz.

Of Angels, of Mankinde, of the Heavens, the Starres, the Planets, the foure Elements, with their order, nature and government: As alſo of Minerals, Mettals, Plants, and Precious ſtones; with their colours, formes, and vertues.

By DANIEL WIDDOWES.

The ſecond Edition, corrected and enlarged.

1 King. 4. 33. *He ſpake of Trees, from the Cedar tree that is in Libanon, even to the Iſope that ſpringeth out of the wall: He ſpake alſo of Beaſts, and of Fowles, and of creeping things, and of Fiſhes.*

Theſe little leaves the Worlds huge load ſuſtaine,
And what beſides the great World can containe.

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TO
THE HONORABLE
Sir *William Parſons* Knight Barronet,
his Maieſties Survayour Generall, Com-
miſsioner in the Court of Wards, and one of
his Maieſties moſt Honourable Privie
Counſell in *Ireland*, &c.

Honourable Sir:

Doe preſent to your view a ſmall frame of the world, and of the Creatures therein contained, drawne with the Penſilles of iudicious *Scribon*, and of *D.W.* A worke in nature not unlike to our Survayes in *Ireland*, that repreſent moſt lively, vaſte Countries within a ſmall Map. I offer this to you, having heretofore given to you an account of

those services that I have lately done in the survey of *Ireland*, you being Survayor Generall of that kingdome, wherein I have spent the most part of thirty yeares, in the service of my Prince and Country, *Tam Marte, quam Mercurio*, both by Pike and Pen, with great toyle, much hazard, and many hurts; but little profit. Notwithstanding, your demerits and worth be such, as Gratitude hath chosen your Patronage: and Devotion wisheth all honour, health, and happinesse to you, to my good Lady, and to yours,

At your Honours Command,

I. Wyddowes,

alias

Woodhouse.

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FINIS.

Naturall Philosophy.

CHAP. I.
What Philosophie is.

PHilosophie is a knowledge of Naturall things. Things (her subject) either are He who alone is; from, by, and for whom all things are: or else such they be as are numbred by time, and measured by place, and subject unto motion. God is a Spirit, infinitely good and great. God is but one divine Essence, consisting of three distinct Persons, the *Father*, the *Son*, and the *holy Ghost*. The actions of God are either, the Creating or Governing of the world. The World consisteth either of things invisible, as of Spirits: or Visible, as the heavens, the elements, and the bodyes composed of elements. The heaven of the blessed, *vide Gen.* 1, 1. is counted the third heaven, the Orbes are the second, the Ayre is counted the first. The third Heaven visible is of all substances most perfect, The invisible Spirits, viz. Angels were created heere. Angell signifieth a messenger, by nature hee is a spirit. Angells appeare sometime in dreames and visions, sometime in bodies apparant, and

What Philosophy is.

What God is.

The actions of God two fold.

What Angels are.

How they appeare.

and sometimes in true and reall bodies: their number is great; their office is to celebrate Gods glory, to watch over the world, to preserve us, to declare and do Gods will, to put good motions into our mindes, to resist ill spirits. The Devils were Angels cast from heaven for sin, into the lower parts of the World, and heere they continue seeking to deface the Image of God in man and all creatures.

What their offices is.

Chap. II.

Of motions, qualities, colours, tasting, smelling &c.

THings visible contained in the world, are Substances, or Accidents. Accidents are either generall to all things, as motion, time, and place, for these belong to all: or proper to some things, as Qualities.

There be two kinde of Movers. 1 God. 2 Things created by him.

Two kinde of movers in the world.

Things created move from God, and are of finite power in moving in a prefixed matter, and in time. They be of two kindes, without, or within the thing moved; the one called violent, the other naturall: Motion is an unperfect act, moving to that it was not, from that it was: Five things are in naturall motion, the mover, the thing moved, the terme from which, the terme to which it is moved, and time.

How created things move.

What motion is.

Five things in motion.

There bee sixe kindes of motion, generation, corruption, increase, decrease, alteration of quality, and change of place.

Six kinds of motion.

Qualities are either manifest, or secret: Manifest are either principall, or such as proceede from them: the

What qualities are.

the chiefe of the principall, are heate and colde.

Heate gathereth together things of one kinde, and separateth things of contrary nature; as Gold from Silver or drosse. Colde joyneth together things, as the frost in winter.

What the quality of heate is.

The weaker qualities are moysture and drinesse. Moysture is hardly contained in his owne bounds. Drinesse keepeth his owne bounds.

Qualities common from the first are either seconds or wrought from them.

Second qualities from one or more, are deriued.

From Heate commeth Rarity, and Leuity. For Heate openeth and enlargeth the poores.

Lightnesse & thinnesse commeth of heate.

Raritas or Thinnes is that which hath hollow parts or spongie as a sponge, clouds &c.

Lightnes proceedeth from heate, drawing easily upward. Thicknes and heavines, are of colde. For cold gathereth together, and stoppeth bodyes, by which, bodyes become heavie.

Heavinesse & thicknesse of colde.

Thicknes hath his parts shut up together as stones.

Heavines, moveth downewards: thus is Mercurie, heavier than gold, and gold than Lead.

Tactile or qualities that may bee touched: comming from moisture, are softnes: and tenuitie from the Ayre: smoothnes and slipperines from the water.

What proceedeth from moysture.

From drynesse proceede hardnes and roughnes, casines in breaking and drought.

What from drinesse.

From the first qualities diversly disposed, arise others called sensible qualities.

Their Originall is obscure or more manifested.

Qualities of obscure originall, are such as doe not alwayes plainely & clearely declare the ground whence

The uſe of Colours.

they ariſe. Of this nature are colours: which is the ſplendor of the body, illuſtrated by light, with which all bodies are dyed according to their moyſtnes, decocted more or leſſe apt to receive greater, or ſmaller light. Colour, is either ſimple or mixed.

What a ſimple colour it.

A Simple colour conſiſts of none other, as black and white.

White what it is.

White conſiſteth of much light in a thin body, of an ayery moiſture well concocted.

Blacke what it is.

Blacke, is in a thicke body contayning but ſmall light, of moyſture either aduſt or raw watriſh mixed with the earth: as appeareth in the inner parts of the earth.

Of mixt cullors and whence they proceede. And how compounded.

Mixt colours are from thoſe two, mingled either in a meane or unequall portion, of equall mixture is red. Other are made of this meane, and one of the extreames. Yeallow is of much white and a little red, viz. two parts of white and one of red. Saffron cullour or Orange-tawny, is of greater redneſſe, and of leſſer whiteneſſe.

Purple is of much red, and leſſe blacke. Greene is of much black and leſſe red. This being a cleare moyſture is moſt pleaſant to the eye.

Taſting whence it proceeds: diverſe kinds of it.

Qualities, of a more manifeſt originall are perceived in ſmels and taſtes. Taſte is made from the ſtraining of dryneſſe through moiſture, is either hot or cold, in a high or meaneſt degree. Very hot taſtes are biting, bitter, or ſalt.

Taſtes meanely hot or ſweet: Cold taſts are either thicker or thinner, thicke as ſoure and ſharpe: or thin as tartnes: where alſo we place freſhneſſe.

Smelling whence it proceeds

Smell, is a qualitie comming from a dry earthly heate,

heate, made thin by mixture of vapors. If it be well mingled, it is good: if not, it is ſtincking.

When good when bad.

Theſe qualities come from the firſt, there are others that come by Meanes from the firſt, ſuch are, generating fleſh by drineſſe, and binding in, healing and joyning together, but more moderate. Hid qualities are onely knowen by long experience, comming from the forme and eſſence of a thing, which in moſt things maketh it hard to diſcerne. Hid qualities are either inbred or paſſionate. Native or inbred, come from formes taking their originall from heaven, and therefore are governed, moſt according to the poſition of the heavens and ſtars, being of moſt efficacy in their ſubject matter rightly prepared, and at certaine times.

Qualities ariſing by meanes what they be.

Hid qualities how knowne.

They are either native or paſſionate.

Native governed by the heavens.

How and when of moſt efficacie.

As the Load-ſtone in drawing Iron. The Pionie for falling ſickneſſe, Polypody in the diſeaſes of the liver, &c.

Paſſionate qualities, are effected by an agreeing or diſagreeing concord.

Paſſionate how effected

Concord is the naturall agreement of things, whereby a feirce Bull tied to a fig-tree is made gentle.

What Concord is.

An Olife taken up and replanted by a virgin, bringeth forth aboundance of fruite.

Ocymum a Pulſe, being at the ſowing banned groweth the better: The bleeding of a dead body at the preſence of the killer. Diſcord in naturall things, whereby the horſe-fly is killed with the ſmell of roſes: ſo goats are poyſonous unto plants.

What diſcord is.

Chap. III.

Of the Celestiall bodies, as the Heavens, the Firmament, the Starres, with their places, order and government.

NAturall things are simple or compact: Simple are stable or unconstant; stable are the heaven and starres. Heaven is as it were a vaulted body made of water, thinne like a skinne, and moveable.

What heaven is.

The Firmament is the orbe of the moveable heaven: containing the world, which consisteth of Ethereall and elementall parts.

What the firmament is.

The Ethereall part compasseth the Elementall: and is not variable: it containeth 10. spheres, and is in continuall motion being moved from the East, to the West in 24. houres, and maketh the naturall day. A star is a firme essence, in heaven, giving light. One star is brighter than another, and they are of divers motion, either simple, as from west to the east; or divers, as their variable motion, north and south: and they have their operation over inferiour bodies, which they worke by themselves, or by aspect with others; which is either conjunct, or opposite: conjunct, is either in the same or severall places; ☌.☍.□.△. caracters bee of conjunction ☌. Sextile ⚹, Trine △: quadrat □: opposition ☍, aspects. Their Poeticke rising or falling is either true or apparant, the true is Acronicke, which is of such starres as rise and set about the sunne setting: Cosmicke ascend with the ☉ and set with the sun rising. Those starres which rise Cosmically fal Acronically. Apparent rising is called Helical which is of stars getting out of the sun beames, & so if the star get into the ☉ beames at setting: or when any star setteth with

What the Ethereall part of it is.

What a Starre is.

The diverse kinds of them.

Their operation over bodies, & how it is.

Their rising and falling, & how it is.

with the sun. Starrs are either fixed or wandring, fixed are the starres of the firmament, whose motion is not sensible; For in 72. yeares they move scarce a degree: keeping still one like distance. Stars are knowne frō planets, by their twinkling. The stars are far bigger in compasse than the earth, and they are of sixfoold order, first bigger than the earth, 107. fold, second 87. third 72. forth 54. fift 31. sixt 18. times. These stars are more or lesse glistering: the most glistering are disposed into 48. Images and are devided into three parts the zodiack & both sides thereof. The zodiack containeth 12 signes, ♈.♉.♊.♋.♌.♍.♎.♏.♐.♑.♒.♓. of the East are ♈.♌.♐. fiery signes. North ♋.♍.♏. watery, ♊.♎.♒. Ayery of the West: ♉.♍.♑. earthy Southern signes. Fiery and Ayery are Masculine: Wateriſh signes and earthly feminine.

Stars fixed or wandring.

How knowne from Planets.

How and where contayned in the heavens.

Stars Masculine & Feminine.

Aries the Ram is the first signe of the Zodiacke consisting of 13. starres, representing the image of a Ram, it hath 2. starres in his horne of the 3. bignes and 3. in his taile, and one in the tippe of his right foote of the 4. bignes.

Aries.

Taurus the Bull consisteth of 32. starres, 5. of these in his forehead are called *Hyades*, causing raine, the greatest is called the Bulls eye, being somewhat pale. 7. starres in his shoulder are little and called *Vergiliæ*, and *Pleiades*, because they shew the time of navigation by their rising in the Spring and setting in the Autum.

Taurus.

Gemini the twins of 18. starres; in each head, is a bright star, called *Castor* and *Pollux*.

Gemini.

Cancer the Crab consisteth of 9. starres somewhat obscure.

Cancer.

Leo the Lyon is a bright signe of 27. starres, one in his

Leo.

heart and one in his tayle, are of the first bignes, neare his tayle are 7. starres called *Berenices* haire.

Virgo. *Virgo* the maide with wings of 26. starres, one in her left hand is called *Spica*.

Libra. *Libra* the ballance is expressed with 8. starres.

Scorpion. *Scorpion* hath 21. starres, of which but 14. are notable.

Sagitarius. *Sagitarius* the Archer consisteth of 31. starres.

Capricornus *Capricornus* the Goat, hath 18. starres, of which 12. are most conspicuous.

Aquarius. *Aquarius* the water-bearer, of 24. starres, like a man pouring water fourth of his pitcher, the starre in the extreame of the water is of the first bignes.

totall. 364.

Pisces. *Pisces*, the fishes consist of 34. starres.

Of Stars not in the Zodiacke. The other starres that are not in the Zodiack are either northerne or southerne starres.

What the northerne Constellations. The Northerne Constellations are *Cynosura*, the little Beare hath 7 Starres. Helice the greater Beare hath 27 starres, of which 12 are more visible. Draco the Snake 31. Bootes the Heardman 22. betwixt whose legs is Arctur. Ariadnes Crowne 8. Hercules 28. Cepheus 11. The Vultur or Lira 10. The Swan 17. Cassiopeia 13. Perseus 19. The Carter 13. he beareth upon his left shoulder the Goat, Æsculapius 24. The Serpent 18. starres. The Arrow 5. The Eagle 6. The Dolphin 10. Pegasus 20. The foale 4. Andromeda 23. starres. The Triangle hath 4. starres. The totall 360.

What the southern Constellations are. The Southern constellations are 25. The Whale hath 22 Starres.

Orion hath 38. Eridanus 34. The Hare 12. The great Dog 18. The Whelpe 2. The ship 45. Hydra 5.

The

The Crow 7. The Centaure 37. The Wolfe 19. The Aulter 17. The Crowne 13. The fish 12. Starres. The totall 316.

What Plannets are. Plannets are Starres in the neaver part of Heaven, and are of diverse motions, and are therefore called wandring, which motions happen not according to the course of other Starres, because in the spheeres attributed to the severall plannets, they moving themselves circularly are stayed either in their highest or lowest Absis, or else are made to goe backward. Plannets are stayed when at their set bounds they stay their course and turne to some other part, and so seeme to stand still.

Why called wandring.

When and how they are, stayed.

Absis or Aux, the highest place of the Plannets, to which being moved, they can ascend no higher, is called Apogæon, viz. farthest from the earth.

Absis or Aux, the lowest contrary to the other, and neerest unto us, is called Perigæon.

When and how they goe backe. Plannets are said to goe backe, when removing themselves, they goe not forward their course, but returne backe the way they came, in some part.

The vertues and force of Plannets. The vertues and force of Plannets, are as diverse as their motions be: stronger by the proper habitation of the house, or by conjunction: otherwise they be weake.

The proper house of each Plannet. The proper house of each Plannet is that signe of the Zodiacke, in which first at the creation they were placed after the opinion of Astronomers.

Plannets some of one light, some more. Thus farre in generall. Now some shine with one particular light, other with more. They that have the same shinning, are moved with equall or unequall course. Plannets of uneven course have a proper motion to themselves. ♄. ♃. ♂.

Their

Conjunction of Planets, common or ſpeciall.

Their conjunction is common or ſpeciall. Common are of theſe three together, and it is called the greateſt conjunction: this through his ſlow motion foreſheweth wonders, as Aſtrologers ſay, though their grounds are uncertaine, yet wee will ſet downe what they ſay, not all as truths, yet ſome may bee probable.

They preſage things to come

(Eſpecially the ſunne regarding) deſtruction to kingdomes &c. If ſuch conjunction, bee in a fiery ſigne it preſageth great drought. In a watry ſigne it argueth raine, in Aery mighty tempeſtes. In earthy extreame cold. In Maſculine death of men, In feminine death of women. Speciall conjunction is either meane or extreame. Meane of Saturne and Mars betokens warres, contention, ſtrife of Kings and Princes, and to theſe proſperous ſucceſſours, if the dominant be good in conjunction.

And how.

The extreame conjunction of Plannets, is great or leſſe, greater of ♄,♃. betokening new ſects, and other like. If ♃. be all ſtronger, ſhall be for the beſt, if ♄. be ſtronger, then followeth loſſe, tribulation and great diſcord, ſay the Aſtrologers.

A deſcription of Saturne his properties, how he ruleth in the bodies, and over whom.

♄. Saturne is a ſtar of a leaden colour, finiſhing his courſe in thirty yeares, hee is a Plannet maſculine, of cold and dry nature, therefore melancholicke, bad & not fortunate, whoſe proper houſe is in ♑.♒. governing malancholike perſons, and diſeaſes of that humor, and thoſe of a tough and congealed phlegme as Lepry and Morphew. But if hee governe in his proper houſe in due aſpect and degree, moſt profitable experiments may bee made againſt theſe infirmities, His rule appeareth in conception of men, as in the firſt moneth, and in the eight moneth much more. where-

Wherefore the child borne in this moneth, through the bad aſpect, and coldnes of Saturne, can ſcarce live long: hee ruleth alſo the lives of men, eſpecially in their end, when old men bee cold and full of fleame, as ſay Aſtrologers.

A deſcription of Iupiter. His properties.

♃ Iupiter is a bright Plannet, which runneth his courſe in 12. yeares, his light is ſo great, that it cauſeth a ſhadow, being neere the earth, of which he is called Phaeton: He is hot and moyſt of nature, good, maſculine, and his houſe is in ♐ and ♓ he ruleth over the ſanguine, yong men and merry ſports, and over diſeaſes ſpringing of bloud not aduſt: and rightly diſpoſed. In his houſe, remedies are beſt applied for cure of ſuch infirmities. Vnder his power is the child in the ſecond, but more in the ninth moneth, and the childe that is borne is long of life.

How he ruleth in the body and over whom.

A deſcription of Mars. His properties. How he governs mans body and over whom.

♂ Mars, is the 3 wandring ſtar, in colour red or fiery ſhining, his courſe is 2. yeares, is a maſculine exceeding hot, ſchorching and dry nature, after a ſort malignant and infortunate: His houſe is ♈ and ♏ hee ſheweth his force moſt upon Cholerike perſons, and upon motions of youth, ſtirring to ſedition and warre: if hee be well diſpoſed in his houſe in fit aſpect and degree, there may bee remedies uſed for the Frenſie, agues and other hot ſickneſſes. He governeth the 3. moneth of conception, and from 40. to 50. of mans age.

A deſcription of the ſunne. The office and uſe of it. How and whom it governes.

Now of ſtarrs, that finiſh their courſe in like ſpace of time ☉.☿.♀. in a yeare ſpace ☉. The Sunne is the brighteſt of all wandring ſtarres, appointing ſeaſons, nouriſhing life, being the fountaine of light, of heate and all vitall powers, hee is hot and meanely dry, his

house is ♌. he ruleth hot and dry affections, and therefore in his rule is fit remedy for such.

In mans conception hee ruleth the 4. moneth, and governeth from 22. till 41. yeares of age. ☉ by being neareſt or farthest from the earth, maketh Solsticium, which is our Summer and Winter: summer is ☉, being in ♋. at the highest; winter solstice is ☉, being ♑ farthest from us. The motion of ☉, causeth like length of day and night. ☉, in ♈ and ♎ the Sun in these pointes of heaven is equally moved in the 6. signes of our hemisphere, and also in the six opposit, although the points and times of both Equinoctialls vary and change.

He maketh winter and summer.

Length and shortnesse of dayes.

A description of Venus.

♀ Venus is a very white star, she goeth neare ☉, sometime before him, sometimes after him; in the morning going before him, she is called Lucifer, in the evening following, she is called Vesperugo and Hesperus. ♀ is could and Ayery, and moyst, her house is in ♂ and ♎. She loveth youth, women, and wives, ruleth cold and moyst diseases, happening most about the genitalls. Therefore ♀ in her house in due aspect is best remedy of such, she useth her power in the 5. moneth, and disposeth life, from 14, to 20. yeares and two, according to Astrologers.

Her properetics: how and in whom she ruleth.

A description of Mercury. His nature: how and in whom he ruleth.

☿ Mercury is the least wandring star, somwhat white; his nature is changeable, and full of turnings, hee is hote with the hote, cold with the cold, of the nature of him with whom he is joyned, his house is ♊ and ♍, & is of force in merchandize, of which hee hath his name, and mathematickes are under his rule, he begins and followes studies, & reports rumors & newes. He guideth the 6 moneth, and from 4. to 14. yeares; if hee joyne with the higher Plannets, he denounceth wet and

and flouds, which also hee doth meeting Venus in a wet house, in his proper house, windes &c.

A description of the Moone.

☾ The Moone is the lowest wandring starre, finishing her course in 27. dayes 7. houres; although this starre have light of he owne, yet doth she borrow her shining from the Sunne. But because her essence or body, is not alike, but thicker in one place, than another, therfore she is not in all places enlightened alike from the Sunne. That part which is turned from the Sunne, is all of it shadowed and darkish, but that which looketh upon the ☉. is full of light, and onely so much light as standeth towards us, seemeth to gaine or lose light, as it is farther off, or nearer the sun, where as indeed ever the one halfe is enlightened from the sunne.

The face seemeth to bee enlightened, as joyned with ☉, or departing from him.

The ☾ joyned with the ☉ in the 4. first dayes is covered with greater light of the ☉ beames, and is called the new Moone, but departing from ☉ she appeareth still more enlightened, and it is either in part or whole.

How the Moone increaseth and decreaseth.

In part before and after the 8 day, called the encrease and the waine of the Moone. In part lesse or more, the lesse is when she is horned, or halfe moone about the 4. day, being distant from ☉ 2. signes: and after 8. in the 26. day, the halfe ☾ is seene about the 7. day and after 22. day when she is distant 3. signes or degrees from ☉. The greater apparition of the Moone in part is, she being neare her roundnes, which is about the 11 day and after the 19. day distant from ☉ 4 signes.

When and how the Moone is in the full.

The full apparition of ☾ is when in a right line she is opposed to ☉ at 14 dayes or full Moone. Although she

finish her course in the foresaid time in the circle of the Zodiacke, yet is allowed to every Moone 29: and a halfe day, because she is to passe forward 2 dayes and 4 howres, before shee can overtake the ☉ which maketh 29 dayes, 12 houres. And in 9 yeares she endeth all her diversity of conjunctions and aspectes, and anew begineth her former revolution, &c.

In what time she endeth her revolution.

What a Commet is.

A Commet is a wandering starr, of divers motions, shining in the region of the Plannets, this appeareth seldome, sometime above, and sometimes below the Plannets. It foretelleth greevous accidents.

Others say that a Commet is a fat substance drawne by the heate of the Sun from the earth, and the heate of the highest region of the Ayre; is set on fire appearing like a starre, and is sometime moved in the ayre.

It foreshewth war, Pestilence, drought, and barrennes of the earth.

The light of some Plannets sometime fayle, especially of ☉ and ☾ The defects happen in the Zodiacke, if these 2. starres bee in the knotts of their circles, or neare to them; which knotts are cuttings, made by the course of the ☉ and ☾, and is called the dragon. The higher is called Dragons head, the lower the Dragons tayle. The Ascendant or higher is where, ☾ departing from the middle Zodiacke, doth come nearest unto us.

The light of some Plannets sometime fayle, especially the sunne and moone faileth sometime, and the reason of them.

Of the Eclipse of the Sunne and Moone and the reason of them.

The descendant, when the ☾ is removing from us. The Eclipse of those starrs is in whole or part. In whole all being obscured, as in the midst of them.

In part it happeneth neare one of the knotts:

The Eclipse of ☉, is by comming of ☾ betweene our eyes and the ☉, in the conjunction of both Plannets.

A great Eclipse of ☉, is when the centure of these starres,

starres, proceed in a direct line to our eye.

The Eclipse of ☾ is the depriving her of the light of ☉, in the opposition, the earth shadowing her, comming in a straight line betweene them; her Eclipse is sooner seene in the East than in the West.

Chap. IIII.

Of the foure Elements.

What Elements are.

Elements are simple essences, lesse durable than the heavens, and are the wombs of mixed things &c.

Some cleare as Ayre and water: three regions of the Ayre.

Of the Elements 2. are cleare, ayre and water. Ayre, which is cold and moyst, and of these there are described 3. regions, the first is hot and dry, this is termed the fiery which causeth it to be called an Element Ayre the flame being but inflamed ayre: the midle region colder and darker; the third region, in which we live, is hot and cold, by the more or lesse reflection of the Sunne beames.

The necessity of the Ayre.

Ayre, is so needefull to creatures, that none live without it, the thinner the better, and more healthfull.

What water is. The natures and uses of it.

Water, is an element lesse thin and cleare, moyst and most cold. Water warmed in channells in the earth causeth hot springs, this is heated by running by some hot mineralls, and helpeth moyst and cold bodies.

Why the water in the sea is salt. The reason of the ebbing and flowing of the sea.

Water, is greater or lesse. The greatest is the Sea, which is salt, because that the starres drawe forth the thin substance leaving the earth behinde. The Ocean ebbeth and floweth after the ☾ motion; and from the new moone to the full, humours increase and after decrease, and the tides are knowne by the Moone. Particular Seas take their name of some country, or of some

accident, as the red Sea, &c.

Of Flouds & Fountaines.

Waters are in flouds or fountaines, fountaines are best which come out of Mountaines, or Rocks, &c.

Diverse colours & tastes of waters.

Water is of divers colours and tastes. Milky, Greene, Red, Salt, sharpe, bitter, and like wine.

What the earth is.

The Earth is a thicke element, cold and dry, and is unmoveable, about which all things move, it is round and all things tend as neare the center as they can.

The compasse of it.

It is in compasse with the water 21600. miles, and is but as a point to the whole world.

Of concreat & mixt bodies

Concreat and mixt bodyes or natures, are essences mixt of parts severally disposed. For from sundry things of divers formes, one forme may bee formed: and things of one mixture according to the divers affection of their elements are diversly affected.

As some are Ayery, some Fiery, and some Earthly. But the proportion maketh temperature, which is a proportion of qualities, cleaving together in mixture: it is equall or uneven, and is either simple or compound: simple is in act or power: compound, as heate with drinesse, &c.

Of mixed liveleſſe natures, as meteors; & what they be, with their severall kinds, and the reason of them.

Mixed natures are either liveleſſe or living. Liveleſſas Meteors which are a hot smoake lifted up by the attractive force of starres, some 15. German miles into the ayre and no higher: this smoke is a vapour or exhalation. A vapour is a moyst smoke drawne from water, and is easily resolved into water. Exhalation is a dry smoke drawne from the earth, easie to fire: from exhalation arise fiery impressions which burne like fire, as pillers, dartes, candles, goates, shooting starres, fiery Dragons, darke streames, fooles fire, and such like firery Meteors.

Mixed

Of Mixed fiery meteors, as thunder, what it is, and the reason of it.

Mixed fiery meteors whose exhalation is somewhat unpure thicker and long, her mixture is thunder which is a fiery exhalation, breaking forth of the cloudes, with a sound. Lightening small and great is a flaming light, of a burning exhalation, shining before thunder. Though we heare not the thunder, it is at the present breaking out of the flash, the eye being quicker than the eare. The great lightening is thicker and burneth more, if it be hardened with the heate of the Sunne, and it selfe, it maketh a stone which is cast out at the cracke, this doth much harme.

Of lightning; what it is, and the reason of it.

Lightening is thicke or thin, this boreth through without leaving any signe of it. The thicker scorcheth and burneth, it hath much earthy matter, setting on fier steeples and such like, and in great flashes is but some small deale of this earthy matter, else all things would be fired.

Of watery meteors, as clouds, what they be, with the reason of them.

Watery meteors, are vapors more fully compact together, and appeare in the lowest part, or midst of the Ayre, as cloudes and such like. A cloude is a vapour joyned together by the extreame cold of the middle region. Cloudes hang in the Ayre by the Sunnes heat, which draweth them up, and by the moving of the windes are tossed up and downe.

Diverse shapes in the cloudes, with the reason of them: as a false Sunne, how occasioned.

In these Cloudes by ☉ and ☾, are framed divers shapes, having no proper matter, but onely appeare in the cloudes, either about ☉ and ☾, or opposite to them as:

A halfe Sunne which is imprinted in the Cloud by the reflection of his beames, in a cloud being wateriſh, so that sometime the shape of 2. or 3. Sunnes are seene, so of the Moone. Bright circles of the cloudes, being

blacke,

black, are from the reflecting beames, seeming to compasse the ☉ or ☾ yet they are far lower. These circles appeare more often about the moone: shee being not able with her beames to consume these vapours.

A raine-bow how occasioned.

The shape in the cloudes opposed to the Sunne, is the raine-bow of divers colours, in a hollow, thin and in an unequall cloud, fashioned by reflection of the Suns beames, and the raine-bow is greater the nearer it commeth to the Horizon. If many raine-bowes be seene, the latter is made by the shining of the other, and are more obscure than the former.

A description of the raine-bow and the signes of it.

The colours of the Raine-bow, be light, red, green, sky colour and yeallow: the raine-bow, is a foreteller of raine, it sheweth that many vapours are dissolued, which will shortly be raine. The hayle is like this, but it is alwayes under the Sunne.

Meteors of dissolued cloudes.

Meteors of dissolved cloudes, are either hardened, or moyst, as raine, which is as it were a cloude melted and turned unto water; if the cloude bee neare the earth the drops are great, if hie, the drops are smaller.

Reason of it.

The rayning of frogges, fish, milke, flesh, and such like, come of such matter being carried up, which doth againe fall with the raine, as wormes &c. are begotten of dead carkases in summer time.

Meteors made harde, after the cloud hath beene melted, are snow and Haile.

Snow what it is and how occasioned.

Snow is a cloude, prepared for raine before it fall, being congealed by cold, is by the motion of the windes dispersed into fleakes, and falleth onely in winter.

Hayle what it is and how occasioned.

Hayle is rayne, made hard in the fall, the higher the fall, the rounder and lesser, because in the fall it melteth.

It hayleth most in Autumne and in the Spring, for then the sharpe ayre, hath most power over the drops, and in winter, the extreame cold maketh it snow being yet in the cloudes.

Dew what it is, and how occasioned.

In the lowest region of the Ayre, are dew and frost. Dew is a vapour thickned with some earthly matter, which in falling is presently turned into water.

Dew falleth onely in summer, for then the vapour is dissolved with the Sunne.

A fat kind of dew like melting hony, especially at the shining of Syrius, being gathered from leaves of trees, is Manna, called also wilde honey, or meldewes.

Manna what it is.

This Manna hardened by the heate of ☉ into lumpes, is called Tereniabin.

Frost what it is, and how.

Frost is a dewish vapour, made very hard by cold in winter before it be dissolved.

Of Meteors caused by both kinds of smoake, and the reason of them.

Meteors made of both kindes of smoake joyned together, are windes and such like.

Winde what it is, and the diverse kinds of it.

Winde is a subtile smoke, beaten downeward by the cold in the middle of the ayre, and is moved sideling on the earth: Auncients noted out 12. principall windes, all which in regard of matter are hot and dry, but differ for their situation of their qualities.

Storme. Whirlewinde.

The winde being great, carried with force, darkens the Ayre, and is called a storme. If it doe roll about, it is a Whirle-winde, if it be but small, it is called Ayre.

Earthquake.

An Earthquake is a fume, contained in the earth: when it findeth no vent, it shaketh it, & is made according to the breadth or depth of the earth. In breadth it causeth sometime such trembling, that it shaketh downe whole Cities. That in depth causeth a gaping or swelling. A Gaping is when the Earth openeth,

as it were her mouth, and doth swallow downe trees, walles &c. A Swelling is when the earth being lifted up like a mountaine, either remaineth so, or else falleth downe againe.

Chap. V.

Of mixed living Natures.

NAtures mixed perfectly are living and corporall essences, indued with a Vegetative soule; A Vegetative soule is a facultie giving life to bodyes. Therefore so long as any part of this shall exercise her power in any body, so long is that alive, and remaineth safe. But her chiefe operation, and so life it selfe, consisteth either in preserving severall bodies or whole kinds. Nourishment is the preserving of severall bodies, and is the making of foode received, like to the body nourished. Vnder that name is every thing which is received to sustaine our bodyes, of which sort is the ayre it selfe.

What a vegetative soule is.

The nature & office of it.

What nourishment is.

Some other faculties are required to perfection of nourishment, as concoction, and his companions: Concoction is a working or framing of nourishment, and it is made either of temperate, or increased heate of the parts to be nourished.

What concoction is, with the necessity of it.

By temperate heate is made ripening: which is a concoction of nourishment with moisture, by how much therefore the moisture shall be better tempered with heate, by so much is the ripening sooner, and more perfect, as in a summer too moyst, the increase of the earth is later made ripe. Concoction arising from greater store of heate, is either elixation or assation.

The necessity of temperate heate for nourishment cleared by comparison.

Elixation

Elixation is a concoction more perfectly working the thicke or watrish moysture, with a strong moyst heate: As flesh is sod in water, whose moyst heate altereth & consumeth the fomy moystnes of meate: if this Elixation remaine unperfect, it is called rawnesse, and the nourishment is not refined, for want of moyst heate: For it was not of power to finish concoction.

Assation is concoction, by meanes of dryer heate fully strengthening the moysture of nourishment. If this strength of bodyes be somewhat weake, it is called thickning; if concoction bee vicious, it is turned unto putrifaction. Moyst and hote things doe most easily corrupt, if the bodyes be not open to the Ayre.

The benefit of good, and the hurt of bad concoction.

In stopped bodyes, heate having no vent is increased. Whence commeth inflammation, which putrifaction doth follow, causing greater heate. This of concoction.

Whence inflammation ariseth.

The Companions of concoction, are Faculties, fitly serving for the perfection of it.

The companions of concoction.

Of these, one goeth before, the other followeth. The former is Attraction and Retention.

Attraction is a facultie, supplying matter of convenient nourishment, as is seene in things drawing out of the flesh Arrow-heads or thornes deepely fastned. So wheat draweth water out of on earthen pot, it being set upon the heape. Retention which retayneth nourishment, untill it be concocted, & doth nourish the body. Nourishment, is first put to and afterward united. The companion following concoction is expulsion.

1. Attraction, what it is.

2. Retention, what it is.

Expulsion, is a driving backe of unprofitable matter: when concoction is once made, it is within or without

3. Expulsion, what it is.

the body. Within, when the stronger thrust superfluities to the weaker, untill they come to the weakest of all. Encrease which is joyned to the nourishment, is continued but to a certaine age, & then the nourishing growing weake it ceaseth. Now followeth conservation of the whole stocke.

What generation is. Generation is a facultie of the body, procreating any thing like it selfe. This faculty preserveth all kindes of things in their estate, though continually they doe perish.

What is the object of it. The object of generation, is the procreating seede of every thing.

The changing faculty, altereth the seede into parts of the body to be begotten.

The ministeriall vertues of this facultie of generation, doe change or forme.

The forming faculty fashioneth the thing into distinct forme.

Chap. VI.
of Minerals and Mettals.

THe Vegetative soule being explained: now follow the kindes of such natures as have perfect, or unperfect growth. Those of unperfect growth are Mettals, which are decocted in the veines of the earth. Mettals are to be melted easily or hardly. Those that are easie to bee dissolved, are either first, or such as spring from them.

Brimstone what it is, and the nature of it. Principall, or first, are of themselves from the originall, as Brimstome, and Quicksilver.

Brimstone is the fat of the earth, with fiery heate decocted

cocted unto his hardnesse, which is the cause that it so speedily is enflamed, and burneth even in water, yea sooner than the fat of the beasts, which though it bee fatter than brimstone, yet it is farre colder. So that for his fat drinesse, it helpeth scabbes of all kinds, and the lepric.

That Brimstone is counted the best, which is greene and cleare.

Quicksilver, what it is. Quicksilver is a slimy water, mixt with a pure white earth, which mettall for the matter whereof it doth consist, is thinne, cold, and heavie.

The nature of it. It is in continuall motion, and his thinnesse causeth that it pierceth mettals.

Gold what it is. Mettals derived from the first, are more or lesse pure; purer, are Gold and Silver. Gold is a mettall made of most subtile and pure red brimstone, and of the like quicksilver. Gold hath the most perfect mixture; as it is most thin, so it is most solide, whose substance is not corrupted, with either earth, water, or ayre, nor consumed with fire, but is more purged in it.

The nature of it. And for his thin solidnesse, it is most soft, and easie to be melted. So that is most worth, which is most red and glistering, and soft, that easily it may be wrought.

Experience teacheth, that the 3 part of one graine of gold can gild a wyre of 134 foote long: upon plates of silver, one ounce of gold will suffice to gild eight pound waight of silver. His nature is to bee marvelled at. It waxeth cold towards day light, so that those that weare rings of it, may perceive it, when it waxeth day.

Where it is found. It is found in the mountaines of Arabia and elsewhere; and the best, in the mountaine Terrat, neare the Citie Corbachiam.

Silver, what it is. Siluer is a mettall begotten of pure white Mercury, and the like cleare white Brimstone. It differeth from Gold almost onely in colour, it being Gold not perfectly refined; yet in pureneſſe, firme ſolidneſſe, and thinneſſe, it is next to Gold, and one ounce of it may be drawne 3200. foote long, ſo that it can ſcarce be diſcerned from Gold. Yet it is thicker an hundreth fold.

The difference betwixt it and gold.

When it is found, it hath the ſhape of haires, twigs, fiſhes, ſerpents, and ſuch like.

Mettals leſſe pure, conſiſt of greater ſtore of Brimſtone or Quickſilver; of greater ſtore of Brimſtone, come Braſſe, and Iron.

Braſſe what it is. Braſſe is a mettall, begotten of thicke red Brimſtone, and Mercury ſomewhat impure; that comming from Cyprus, is called Copper: the matter of Braſſe is more burnt than that of other mettals, and indureth long, and is fit in any worke. For it is without all moyſture, whether it be kept in earth or water. Minerals neare Braſſe are Copperaſſe, &c.

Copperaſſe, what it is. Copperaſſe, is a minerall mixed of humours ſtrained by droppes into ſmall holes, and it ſhineth like glaſſe.

The nature of it. It is hot and dry in the 4. degree, vehemently binding, being of great force to ſeaſon and preſerve raw fleſh. It alſo begetteth ſound fleſh in feſtered ſores, and ſtancheth blood. It is of a greene, yellow, and a skye colour, the beſt hath in it white ſpots; his kinde are Romane vitrioll, and red vitrioll, or the ſome of Copperaſſe.

Iron, what it is. Iron is of ſtore of Mercury, and of thicke ſulphur, impure and aduſt. It may be ſoftened by quenching in

The nature of it. juyce of beane ſhuls or mallowes. It being red hot and

and cooling of himſelfe, becommeth plyable.

But if it be often quenched in cold water, it becommeth thereby, very hard and brittle.

Mettalls of greater ſtore of Mercury, are Lead and Tynne.

Lead, what it is. Lead is an unpure mettall, begot of much unpure, thicke and droſſie Mercury, and likewiſe of unpure Brimſtone; his impurity cauſeth blackneſſe, which by refining is made whiter. It increaſeth in waight, if it lie in moyſt ground.

The nature of it. Yea it is thought to increaſe with raine. It is of a cold and binding nature, and therefore ſcarce wholſome for mans uſe.

Tynne, what it is. Tynne is a mettall mixed of Mercury, white without and red within, and of Brimſtone not well mixed, as it were Lead whited with ſilver.

Thus farre of mettalls pliable.

Mettals leſſe plyable are thoſe which are not eaſily wrought, or melted, and are hard or brittle.

Stones, where of they are, &c the variety of them. Thoſe that bee altogether hard, are ſtones. Theſe are ingendred of a watry moyſture, and fat earth mixed hard togeather. Of ſtones, ſome be rare, ſome common. Of the rare and ſtrange, ſome are of more eſtimation than others.

Precious ſtones. The more eſteemed are precious ſtones, which are more beautifull and fine, in regard of their pure and ſubtile matter: Of Gemmes ſome are of one coullour, ſome of ſundry colours. More or leſſe tranſparent be either white, or of other colours.

Cryſtall. White are Cryſtall or Adamant. Cryſtall is a gem, bright through, begot of a moſt pure ſtony moyſture, and is found in mines of Marble, &c. His quali-

The nature of it.

tie

tie is binding: therefore his oyle or powder is helpefull in Laxes, and increaseth milke in womens brests.

Adamant. The Adamant or Diamant is a gem cleare and most hard, it can scarce be broken (and thence it is named) unlesse steeped in the warme bloud of a Goat that hath drunke Wine or eaten Parsley.

The nature of it.

Transparent Gemmes not white, as the Saphir Sardonix, and Smaragde, have the same coullour in all their kindes.

Saphir. The Saphir is a gem cleare through, of a skie coullour, growing in the East, and specially in India: Being drunke, it helpeth against the stinging of Serpents, poyson, &c. as some affirme.

The nature of it.

Smaragde. The Smaragde is of a greene coullour, making greene the ayre neare about it; the stone of Brytaine is the best. It preserveth the wearer from the falling sickenesse: eyght graines of his shaving drunke, expelleth poyson, &c. as some affirme.

The nature of it.

Sardonyx. The Sardonyx is a cleare gem, representing in coullours the nayle of a mans hand: it preserveth chastnes, and healeth vlcers about the nayles.

The nature of it.

Selenites. The Selenites is a transparent gem like glasse, it seemeth to increase and decrease with the moone: whose shape in the night it beareth, and is called therefore the Moone-stone, &c. It is of a white, blacke, and yellow coullour. His scrapings heale the falling sickenesse. Bright shining Gems doe follow.

The nature of it.

Carbuncle. The Carbuncle is a gem shining in the light like fire: it is the noblest, and hath most vertues of any precious stone.

The nature of it.

Calcedonian. The Calcedonian is of a purple coullour, shining like a starre, it expels sadnes and feare by purging and chearing

chearing the spirits. It hindreth all visions.

Astarites. The Astarites is a Crystalline stone, having in the middest like a full moone. Bright stones not shining do follow: or the lesse shining.

The nature of it.

Rubie. The Rubie is a red gemme, shining in darke like a sparke of fire: it cleareth the sight, it expelleth sad and fearefull dreames.

The nature of it.

Topaz. The Topaz is of the colour of gold, casting beames in the Sunne: being layd to a wound, it stancheth blood: or cast into hot water, keepeth the hand from scalding.

The nature of it.

Hiachinth. The Hiacinth is of watersh colour, it is exceeding hard, and cloudie in the darke, but pure and cleare by day. It is colde, moderating the spirits of the heart and of the other parts, and causing mirth, which being worne obtaineth favour.

The nature of it.

Precious stones of lesse shining, be Corrall, Asbestos, Magnes, and Galacte.

Corrall. Corall is a stone growing in the Sea like a slimie shrub, which by the ayre presently is made hard. It is taken up full of mosse, but being unbarked, it appeareth cleare in his proper colour. The spongie Corrall is white and colde. The solid is more stonie, and is red and blacke. Red and full of branches is the best, which worne of one shortly to be sicke, waxeth pale. His tender substance is affected by the bad vapour, which yet is unable in the body to afflict it. It is good for sore eyes, for the stone, and falling sickenesse.

The nature of it.

Asbestos. Asbestos is of an Iron colour, being once fiered, it cannot be quenched: it is found in Arabia.

The nature of it.

The Loadstone. Magnes or Loadstone is of a skie colour, or an Iron colour: It draweth Iron. It hath like vertue

The nature of it.

with the Adamant. It purgeth the dropsie, helpeth the flux; respecteth the North and South pole.

Galactites. Galactites is of an Ash colour, it seemeth to sweat as it were milke, it increaseth milke, and helpeth running of the eyes, and ulcers.

The nature of it.

Now follow stones of divers colours.

Achates. Achates is a stone of divers colours, resembling a Lyons skin: sometime it is blacke with white veynes and yellow: sometime it is as it were sprinkled with bloud, it is very variable in colour. Eagles lay it in their nests to preserve their young from poyson.

The nature of it.

Turcois. Turcois is darke, of a skie colour, and greenish: It helpeth weake eyes and spirits.

The nature of it.

Corneolus. Corneolus is like water of washed flesh. It helpeth against the Pyles in the fundament, and to stop fluxes. In a ring it restraineth anger.

The nature of it.

Chrysoprasus. Chrysoprasus is of a greene colour with golden spots. It shineth a little in the darke, it is rare and deare. It comforteth the heart, helpeth dim sight, &c.

The nature of it.

Hematite. Hematite is of an Iron colour with bloudy veynes: It is cold and dry, cooleth hot waters, stancheth bloud, and helpeth against the scorching of the Sunne, as Authors write.

The nature of it.

Also the qualities of other stones depend rather upon authoritie than upon proofe.

Stones be found in Beasts, Birds, and Fishes.

Stones found in Beasts be;

Chelidonius. 1. Chelidonius is a small stone in the belly of yong Swallowes. It is found in those of the first hatching in the new moone: if two be found, the one is red, the other blacke. The best is of a sprinkled red. The red in a linnen cloath carried under the left arme, expelleth madnesse,

The nature of it.

madnesse, the falling sickenesse, and getteth favour, say some.

Alectorius. 2. Alectorius is of a christall or watrish colour. It is found in the Maw of an olde Capon: as big as a beane in one of nine yeere old, small in one of five yeere olde. This stone quencheth thirst, being held in the mouth. It maketh warlike and couragious.

The nature of it.

Toadstone. 3. The Rubet or Toadstone, groweth in the head of a Toad: It is of a white browne colour, sometime it hath a skie coloured eye in the middle: It is to bee taken before the Toad touch any Water. It is a remedie against all poyson. If it come neare poyson, it changeth colour, and sweateth as it were drops.

The nature of it.

In fishes are found stones which are made of the cold hardening their matter.

Crabs eye. 4. The Crabs eye, of the female, is like an eye, it dissolveth bloud congealed, and expelleth stones.

The nature of it.

Perchstone. 5. The Perch stone found in his head, is white and as big as Hemp-seed.

Carpestone. 6. The Carpe stone found in his chap, is triangular, white without, yellow within. It helpeth against aboundance of choller. Thus farre of precious stones.

The nature of it.

These following are of price because of their beautie, but not so rare.

Porphirite. Alabaster. Porphirite, is a Marble shining like purple. Alabaster is a marble like in colour, to spotted Honny. At this day it is cleare, and smooth, like Plaster.

Ophite. The Ophite is a most hard marble, of a sad greene spotted, and serpent-like colour.

Common stones. Common stones are of unpure slimie earth, thicke,

and darke: some be solid, as the Flint, Boulder, the Whet-stone, &c. Some be full of pores as the Pumise, Gravel-stone, and free-stone.

Salt, what it is. The nature of it.

Salt is a fryable mettall, begotten of a waterish and earthy moysture, mixt and decocted together: It bindeth, scowreth, purgeth, disperseth, represseth, maketh thin and hard. It is gotten in pits or waters. The sorts of digged salts be:

Salt Amoniack. The nature of it.

Salt Amoniack is found in plates under the hotte lands of Cyreniæ. It is hot and dry in the fourth degree, and serveth to purge slimie humors. That which Apothecaries sell in blacke clods, is made of Camels stale, and because store of Camels be in Armenia, it is called Armeniack.

Salt Peter.

Salt Peter is found in dry places under the ground, and in hollow Rockes: It is sometime called Nitre, of a Region in Egypt. Of this kinde is the salt called Borax.

Salt Gem.

Salt Gem, is a white kinde of Even-salt, shining like Crystall: It is also called Stonie, marbly, salt Sarmaticke, or Dacian.

Salt of Indie.

Salt of Indie is blackish Salt, or ruddy. It is in clods cut out of mount Oremen.

Salt of water.

Salt of Water is taken on the Sea coast, or from some lakes and springs, and it is sod and congealed of the Sunne, or by fire.

Allome.

Allome is a salt sweat of the earth, it is either liquid or hard.

Liquid Allome.

Liquid Allome is called Roch or Rock-Allome, with it is paper washed, &c.

Hard Allome.

Hard Allome, or Allome Sciffile is thicke, and cleaveth: It is as it were gray.

Bitume

Bitume is a fat and tough moysture, like pitch, and is called Earthy pitch. Bitume.

Liquid Bitume.

Liquid, is like an oylely moysture flowing, and is of divers colours, after the varietie of the place, of which Naphtha is a white fat of Bitumen, which enflamed by water, doth easily draw to it fire, through store of oyle that is in it.

Naphtha Petreolum.

Naphtha Petreolum is found in rockes. It is for his fatnesse of some called Oyle.

Ambar of Arabia.

Ambar of Arabia is Bitume of an Ash colour.

Hard Bitume.

Hard Bitume is tough, like foam swimming on the water, but being taken forth, it waxeth hard: of this kinde is *Asphaltus*, which is blacke Bitume, hard like stone pitch: The best is gotten in the dead Sea of Iudea. &c.

Pissaphaltus.

Pissaphaltus Asphaltus, smelling of Pitch, mingled with Bitume: It is called Mummie. Where this wants, they sell us counterfeit of Syria; for poore men that die there, be stuffed with Bitume, but the rich are dressed with Mirrh, Alloes, &c.

It also is found in clods rolling from mount Ceravine into the Sea.

Succinum.

Succinum is Bitume, like a stone, exceeding hard, named, Ex succo, the Iuyce of the earth. It is white or yellow, which is called Ambar, or blacke as Iet. His fatnesse is so great that it burneth like a Candle, and smelleth like the Pine tree. It draweth to it chaffe, and such other light stuffe, by a certaine hid nature.

Metallar Earths which are digged forth of mines.

Terra Lemnia.

Terra Lemnia, an exceeding red Earth of Lemnos Ile, digged in a red hill: It is sometime used for Armeniau. In old time this had Dianaes seale upon it,

printed by her Priests, who were onely wont to wash this earth.

The nature of it. It is of force to expell poyson, it healeth wounds festred and old, and poysoned.

Bole Armenian. Bole Armenian, is earth of Armenia, it is of a pale red colour, smooth, and easie to breake as chalke: It is a dryer, and profiteth against all fluxes.

The nature of it.

Terra Samia. Terra Samia is white, stiffe, and tough, comming from the Ile Samos.

Ampelite. Ampelite is a pitchie earth, cleaving and blacke, it is named of annoynting Vines, to kill the wormes. This earth is like that we call Stone, or Sea coale.

Chalke. Chalke is white earth of Creete, and there is found of it in many other places.

Black Chalke There is also some found that is blacke, which is called Pignitis.

Chap. VII. *of Natures perfectly living.*

SO farre of Minerals; Now follow Natures perfectly living.

What natures perfectly living are. Natures perfectly-living, are Plantes, or bodies endowed with a soule. In all these bodies are sundry vertues, according to the temperature of the principall qualities. For the forme useth their qualities as Instruments: Whence come diverse distinct degrees of those qualities, as some are hot, cold, dry, moyst, in the first, second, third, and fourth degree. The qualities in the first are obscure, and scarce to be perceived: in the second they are apparant and manifest: in the third they be vehement: and in the fourth immoderate, and not to be indured. And againe each of these hath a beginning, middle, and end.

Plants

Plants grow from a stalke or a trunke. Those from a stalke have but one stalke or many. Trees are Plants having but one stalke, full of Boughs, and rising on high from the earth. Some grow onely in hot Countries: others grow indifferently in all places: those that prosper best in hot Regions, are Frankincense, Mace, Pepper, Palme, Balsame, Pomegranet, Lemmon, Ceder. Plants.

Frankincense tree. The nature of it. The Frankincense tree groweth chiefly in Arabia; it is tall, and hath leaves like the Mastike tree, his gum is soft, white, fat, and round, and is apt to perfume, and the stiffer and liker Rosen it is, so much the better. This perfume was used for sacrifice.

Myrrhe. The nature of it. Myrrhe is a tree in India, of hard wood, wrythen towardes the earth, with a smooth barke, the leaves sharpe poynted towardes the end: his gum is fat, like Rosen, thicke, and shining red. The distilled liquor of fresh Myrrh was once called Stact, but now it is named Storax. It is hot and dry in the second degree. It dryeth & closeth wounds, it expelleth the wormes: it is of force against an old cough and short winde. It is bitter: It is good to heale wounds of the head.

Mace. Mace is an Indian tree, grown in the Ile of Banda. It is almost like the Peach tree, it hath narrow and short leaves, whose fruit is the Nut-meg covered with Mace.

Nutmeg. The Nut-meg hath an huske like a Filberd: the fruit is covered with a rinde like our Wal-nut, which with ripenesse openeth and sheweth the Mace, which doth cover the Nut-meg, &c.

The new and best Nut-meg is full of juyce or oyle, smelling sweete. It dryeth and heateth in the ende of the second degree, with a kindely binding.

Pepper. Pepper groweth in India. Of it be two sorts of trees,

and

and two sorts of fruits, one long, the other round. The round groweth on branches like vines, which imbraceth trees that stand by it; and his fruit is in clusters, first greene, then being dryed, it turneth blacke and rough: it is gathered in October.

The nature of it. Long Pepper groweth like the long bud on Nut-trees. It is hot and dry.

Palme tree. Palme tree groweth most in Egypt, and Arabia, alwayes greene, with a long round bodie; his barke is like scales of a Fish, and the more it is pressed, the better it groweth: therefore was it used as a reward for the Conquerour.

Wilde Palme tree. The wild Palme in India, is called Thamarind, the Date is his fruit, it being ripe is blacke and sweete:

The nature of it. Of these bee three kindes. Our Dates come from Egypt: they are hot temperately.

Balsame tree. Balsame is a low tree, his trunke is not much unlike the Turpentine tree; it hath leaves like Rew, but wither, never falling. It groweth in the valley of Hierico, and Egypt: being cut it sendeth out a milkish li-

The nature of it. quor: it is to bee cut in the uper part of the barke with glasse or bone, and not with Iron, least it die. His juyce is gathered with wooll into small hornes: of it is scarce got each yeare six Congies: a Congie is about three Pints.

Balme. Native Balme mixed with milke doth easily separate: and easily dissolve in water, neither doth it staine

The nature of it. cloth. It is hot and dry in the second degree: it is of thin parts, and hard to come by. In his stead most commonly is used the Oyle of Nut-megges.

The

The Pomegranet
The Orange
The Cedar tree. } doth follow.

1. Pomegranet is a low tree, that hath narrow shining leaves, red flowers, and his fruit filled with graynes. It came from the Country in which Carthage stoode; The juyce of this Apple helpeth the stomacke: It is very good in a burning Fever. Pomegranet. The nature of it.

2. Pomecytron, Lemmon, and Orange trees, are alwayes greene, the leafe of the Cytron is like the Lawrell, endented. The fruit is rough, and alwayes fruitfull; his juyce cureth inflammations, and other diseases in the skin: the barke comforteth the heart, &c. Pomecytron. The nature of it.

The Orange hath a smoother skin, and leafe. Orange.

3. The Cedar is like to Iuniper, his leaves being sharper: the tree is exceeding tall, chiefly of that of Cyprus; It never rotteth, his nature destroying sound things, preserveth corrupt things. Cedar. The nature of it.

The trees lesse hot are either fruitfull or barren. The fruitfull have fruit that have a rinde thicke, or thin. The thinner rinde is of Apples, or Berries. Apples are round, as the Fig, Olive, Plum, Cherry.

The Fig tree is not high, it hath a smooth barke like the Walnut tree. It yeeldeth a long fruit like a Peare, full of graines. It is so fruitfull that it bringeth forth three or foure times in a yeare: so that one Fig thrusteth off another. They are of two kindes, great and little. Figtree.

The Olive: the Apple tree: and Peach be common.

The Quince tree is lower then an Apple tree, his fruit hath downie hayre; it is called Cidonia, of a ci- Quince tree

tie

The nature of it. tie in Crete, where firſt it grew. The fruit is cold and binding, and doth much profit hot ſtomackes.

The Peare, the Plum, the Medler, and the Cherry be common.

Now follow thoſe trees that beare Berries.

Lawrell tree. The Lawrell is a tree growing in hotter countryes, which in colde doth hardly proſper; it hath ſharpe and thicke leaves ever greene, with a thin ſmooth

The nature of it. barke: His leaves be hot and dry, his oyle for hot and ſoftning nature helpeth diſeaſes of the breſt; and other ſpringing of colde. The powder in wine cauſeth urine, breaketh the ſtone of the bladder and reynes.

Iuniper tree. Iuniper beareth a ſmall fruit, the ſpace of two yeares, and before the firſt bee ripe, it bringeth forth other: This tree hath ſhort and ſharpe leaves, and a ſtraight backe, and ſlit almoſt in every place: the gum ſweating out of is, Vernix, called ſo becauſe it congealeth

The nature of it, in the ſpring. It is hot and dry in the third degree. It healeth and gleweth, and alſo heateth a colde ſtomacke. His berries are hot and dry in the firſt degree, comforting the ſpirits, and healing putrifactions. It conſumeth rotten and moyſt humors. The oyle helpeth the Gout, if you annoynt the backe-bone therewith: it cureth deafeneſſe, and eaten helpeth melancholy, and ſtayeth the Rheume, and the Flux.

Now follow trees whoſe fruit hath a ſhell.

1. The Almond tree.

2. The Walnut tree.

Cheſnut tree. 3. The Cheſnut tree taketh his name of a towne in Magneſia, the tree is much like the Wallnut, yet the leafe hath more veines, and his edge like a Saw. His fruit is covered with a ſharpe huske, and within it hath

a red huske. It is of two kindes: both hot and dry in The nature of it. the firſt degree; and for their earthie matter binding. They are hard to diſgeſt, and beget lice: but good if roſted and eaten with Salt, Pepper, and Sugar.

The powder of dry Cheſnuts voydeth Vrine.

The Beech is tall with a thicke white barke, or a Beech tree. ſad red. It hath leaves like Lawrell, nicked on the edge. His fruit is a thecrangle Nut, cloſed in a little The nature of it. pricking huske. His fruite is hot, ſweete, and binding. His leaves are coole, which being eaten, doe helpe much the griefe of the gums and lippes. If they bee ſtamped, they much ſtrengthen dead members, being anoynted with it. Swine and Miſe delight much in this fruit.

Trees whoſe fruit is but halfe covered.

The Oke is a tall tree, having a thicke rough barke, Oke tree. his leaves are deepe gaſhed, and his boughes are knotted: his proper fruit is the Acorne: the gall and his glew are but accidentall. It is moderately hot and dry, The nature of it bindeth, and eſpecially the little skin which cove- it. reth the Acorne. Diſtilled water of Oke leaves cureth Fluxes, and rottenneſſe of the Liver: and expelleth all congealed bloud. His leaves ſtamped and applyed to greene wounds heale them.

Likewiſe they draw heate from ſwellings and pimples ariſing by heate.

Galls grow eſpecially in olde Okes, and in the night, in the Summer, the Sunne then leaving Gemini: they bee of two ſorts; ſmall and rough, and great and ſmooth.

Galls have in them ſometime Spiders, Flies, and Ants: Some thinke Spiders doe preſage peſtilence,

Flies warre, and Ants dearth. The powder of Galls doth heale wounds without any scarre. Robur is very hard and during: It hath lesse fruit.

Ilex tree. The Ilex is very tall with leaves, Lawrell-like, ever greene, but lesser and sharpe: a thicke wood, and of a blacke red colour, and is very rare.

Corke tree. Another kinde is the Corke tree, having like leafe, fruit, and greenneſſe, yet is it leſſer, and hath a moſt thicke barke, which though it bee taken off, yet doth not the tree wither: it is called the female Ilex: his wood is full of pores and holes, and moſt light, and not to be sunke.

The nature of it.

Now follow trees that beare gum, whoſe Nut hath scales.

Pine Apple tree. The Pine apple is a Tree full of boughes, with hayrie leaves like Combe teeth, of whoſe sharpe top it takes his name. His fruite is Pine-nuts, theſe are hot and dry, and binde. They are good againſt coughs, and conſumptions, strengthening, and heating.

The nature of it.

The wilde Pine is a great high tree with hairy leaves.

Pitch tree. The Pitch tree is tall with a blacke barke, tough and stiffe, and running along his boughes like a croſſe, from both sides of the trunke: his leaves are broader, softer, and smoother than Roſemary. From betweene the barke and wood of this tree floweth a gumme like Rozen.

Firre tree. The Firre tree is a kinde of Pitch tree, but somewhat whiter, his leaves on one side are of an Aſh colour: from this floweth alſo a Rozen, which sod with honey profitteth againſt the deſtillations of the head and throat, againſt the Quinſey and other maladies; it aſſwageth the inflammation of woundes, and joyneth them:

them: it sodden with Barley bran and wine, cureth hard kernells.

Larix tree. The Larix is a high tree with a thicke barke clifted on each side: his boughes grow by degrees about the trunke: his leaves are thicke, long, soft, and hairie; his fruit is almoſt like the Cypres, and hath a pleaſant smell. The wood of this, for that it is dry and full of Rozen, burneth vehemently, and soone melteth mettall. His Rozen is in smell, taſte, and working better than common Turpentine.

The nature of it.

In colour it is like honey, tough but not hard. In the body of the tree groweth Fungus Agaricus, a swamp or muſh-rome. The beſt is white, thin, full of pores, light, and eaſie to breake: it purgeth fleame.

Now follow trees that bring forth no fruit of note, called Barren-trees.

Elme tree. The Elme is tall with rough leaves and sharpe: his wood is yellow, hard, & deformed: the barke, boughes, and leaves have a healing faculti'e in scabbes. It alſo cloſeth woundes.

The nature of it.

Alder tree. The Alder hath a long straight trunke, his wood is ſoft, his leafe like Peare-tree, but greater, thicker, and rounder: it groweth in moyſt places, and by rivers. His wood is hot and dry, and indureth long under the earth, or in water. His thin and fat leaves layd upon tumors with hot water cure them, and helpe all swellings.

The nature of it.

Teile tree. The Teile is a large and broad tree, with a thicke ſtalke: his leaves like Ivie, but softer and sharper. It bindeth: his other qualities are like the wilde Olive.

The nature of it.

Boxe tree. The Boxe hath little round leaves alwayes greene, his ſtalke is rough, for moſt part full of knotts, and blacke:

Flies warre, and Ants dearth. The powder of Galls doth heale wounds without any scarre. Robur is very hard and during: It hath lesse fruit.

Ilex tree. The Ilex is very tall with leaves, Lawrell-like, ever greene, but lesser and sharpe: a thicke wood, and of a blacke red colour, and is very rare.

Corke tree. Another kinde is the Corke tree, having like leafe, fruit, and greennesse, yet is it lesser, and hath a most thicke barke, which though it bee taken off, yet doth

The nature of it. not the tree wither: it is called the female Ilex: his wood is full of pores and holes, and most light, and not to be sunke.

Now follow trees that beare gum, whose Nut hath scales.

Pine Apple tree. The Pine apple is a Tree full of boughes, with hayrie leaves like Combe teeth, of whose sharpe top it

The nature of it. takes his name. His fruite is Pine-nuts, these are hot and dry, and binde. They are good against coughs, and consumptions, strengthening, and heating.

The wilde Pine is a great high tree with hairy leaves.

Pitch tree. The Pitch tree is tall with a blacke barke, tough and stiffe, and running along his boughes like a crosse, from both sides of the trunke: his leaves are broader, softer, and smoother than Rosemary. From betweene the barke and wood of this tree floweth a gumme like Rozen.

Firre tree. The Firre tree is a kinde of Pitch tree, but somewhat whiter, his leaves on one side are of an Ash colour: from this floweth also a Rozen, which sod with honey profitteth against the destillations of the head and throat, against the Quinsey and other maladies; it asswageth the inflammation of woundes, and joyneth them:

them: it sodden with Barley bran and wine, cureth hard kernells.

Larix tree. The Larix is a high tree with a thicke barke clifted on each side: his boughes grow by degrees about the trunke: his leaves are thicke, long, soft, and hairie; his fruit is almost like the Cypres, and hath a pleasant

The nature of it. smell. The wood of this, for that it is dry and full of Rozen, burneth vehemently, and soone melteth mettall. His Rozen is in smell, taste, and working better than common Turpentine.

In colour it is like honey, tough but not hard. In the body of the tree groweth Fungus Agaricus, a swamp or mush rome. The best is white, thin, full of pores, light, and easie to breake: it purgeth fleame.

Now follow trees that bring forth no fruit of note, called Barren-trees.

Elme tree. The Elme is tall with rough leaves and sharpe: his wood is yellow, hard, & deformed: the barke, boughes,

The nature of it. and leaves have a healing facultie in scabbes. It also closeth woundes.

Alder tree. The Alder hath a long straight trunke, his wood is soft, his leafe like Peare-tree, but greater, thicker, and rounder: it groweth in moyst places, and by rivers.

The nature of it. His wood is hot and dry, and indureth long under the earth, or in water. His thin and fat leaves layd upon tumors with hot water cure them, and helpe all swellings.

Teile tree. The Teile is a large and broad tree, with a thicke stalke: his leaves like Ivie, but softer and sharper. It

The nature of it. bindeth: his other qualities are like the wilde Olive.

Boxe tree. The Boxe hath little round leaves alwayes greene, his stalke is rough, for most part full of knotts, and

blacke: the wood is hard and heavie, it ſinketh in water, and never decayeth with age. Of this, boxes are named, becauſe moſt of them were wont to be made of Boxe. It is dry and binding; the powder of his leaves, with Lavender and water, profitteth againſt madneſſe. Lye of Boxe maketh yellow hayres.

The nature of it.

Birch tree. The Birch is a tender tree, his barke is blacke at firſt, but after white; his wood is ſoft and weake above other. It hath a ſweete ſap; In the rude age, his barke was uſed for paper. His ſap taken in the Spring helpeth the ſtone, laundies, and rottenneſſe of the mouth; alſo being put in milke, preſerveth the Cheeſe made of that milke from Maggots.

The nature of it.

Willow tree. Willow groweth apace, it endureth long, for though it bee hollow and rotten, yet it liveth. It is of two ſorts, ſolid or brittle: the ſolid is blacke or yellow: the blacke is the greater and better, and is moſt apt for binding.

The yellow groweth chiefly neare water, it is ſometime white. The brittle Willow is moſt white, and unapt for binding. Willowes are dry and thicke: his leaves and barke ſod in Wine, helpeth gripings of the belly.

Poplar tree. The Poplar delighteth in moyſt and watriſh places. It is white or blacke: the white hath a long ſtraight trunke, and a ſmooth barke: his leafe round, and after ſharper, greene beneath, hoarie above, and do continually ſhake; it is moderately hot and dry. The roote taken in drinke, defendeth from gripings in the belly. Blacke Poplar is like the white, but greater, ſofter, and hath narrower leaves, and greene below, and of an Aſh colour above. It is hot and dry: the boughes held

The nature of it.

held in the hand (ſome ſay) forbid wearineſſe of hand and foote: his gumme ſtamped helpeth looſeneſſe.

Shrubs. Now follow ſhrubs, which ſpring up with many ſtalkes; and are noble or leſſe noble: The noble, as

Cinnamon. firſt, Cinnamon, which is a barke of a ſhrub of that name growing in India: of a blacke colour, with thin boughes, which if they be broken, caſt forth a ſweete ſent: His barke is of two ſorts, thicke and thinne. The thinne is of the ſharpeſt and beſt taſte. The thicke is more ſlowly digeſted; it comforteth the heart: the beſt is red and ſharpe with ſome ſweetneſſe. It is of ſubtile parts, hot in the third, and dry in the ſecond degree. It helpeth a colde ſtomacke, it ſtrengtheneth the ſight, heart, and liver, and begetteth pure blood.

The nature of it.

Caſſia Fiſtula. Caſſia Fiſtula, is a round, great, and purple Cane, having a very blacke pith; the heavieſt and reddeſt Canes are beſt. Of the blacke pith is made a good and gentle purgation, called Caſſia extract. This helpeth much againſt feavers, and many other diſeaſes, if one ounce of it be taken with as much Roſe water.

The nature of it.

Shrubs leſſe noble.

Haſell. The Haſell is an high ſhrub with a ſlender ſtalke, and full of white ſpots. His leaves are broader, and have more gaſhes than the Alder. The tree beareth the Filberd, and the Nut: theſe Nuts are hot and moyſt, and make fat, but hurt the ſtomacke, and procureth a laske. If ſtamped in water and ſugar, they bee applied, they helpe an old cough. The aſhes burnt with Swines or Boares greaſe, and applyed to the head, cauſeth the hayre to grow.

The nature of it.

Elderne. The Elderne hath boughes of an Aſh colour, and

in

in it is ſtore of pith, and his leaves are much like to thoſe of the Wal-nut tree, it beareth purple berries, having red iuyce.

Dwarfe Elderne is low & ſhort, with a foure-ſquare ſtalke; theſe plants are hot and dry, and have power to purge and digeſt: Alſo it healeth and cloſeth; the roote or leaves of Elder ſod in wine, purge the dropſie, and nothing is more effectuall to that purpoſe than the roote of Dwarfe Elderne. Water in which the leaves of Elderne are ſod, helpes to rid the dry cough. The Pitch or an electuary of the berries, expelleth ſweate, and all poyſon.

The nature of it.

Barberries. Barberries are not much unlike the wilde Peare, although they bee farre leſſe, and in the boughes ſome two or three prickes grow together. His leafe is like Quince leaves, but narrower. Barberries bee hot and dry in the ſecond degree. The iuyce of the berryes profitteth againſt inflammation of the Liver, as alſo againſt inward impoſtumes: if it be applyed with night-ſhade, it quencheth thirſt. The barke of his roote or fruit ſtamped, plucketh out a thing faſt in the fleſh: his ſyrrope tempered with ſugar comforteth the hart, reſtoreth appetite, profiteth againſt burning Feavers, and all inward diſeaſes of much blood.

The nature of it.

Small Rayſin. The ſmall Raiſin hath purple boughes, and pannpin leaves, but leſſe, and of blackiſh greene: it hath round red berries, upon long ſtalkes; his fruit and leaves are colde and dry in the ſecond degree, having power to cloſe. The iuyce of the fruit taken, helpeth againſt trembling of the heart, & inflammations of the bodie; but chiefly it helpeth the plague: his iuyce with Endive water profitteth to remove ſpecks of the face.

The

Roſe. The Roſe groweth up with ſmall twigs, of a blacke greene, full of crooked prickes; his leaves are dented on the edge; his fruit, namely, Roſes bee of diverſe colours. All Roſes bee colde and dry, and helpe both inward and outward affections of the body.

The nature of it.

The iuyce ſod in Wine helpeth griefes of the head, eyes, and gums. Honey and Roſe water ſtrengthen all parts, and purge melancholy and fleame; ſodden with Fennell and Salt, his oyle healeth burnings, and layed on the forehead taketh away heavineſſe, and hot ſickneſſes. The funge of wilde Roſe trees in powder with wine expelleth the ſtone. Water of Roſes helpeth ſore eyes, comforteth and cooleth the braine, it being drunke, relieveth the heart and ſtomacke: it keepeth the ſpirits, and naturall heate.

Bramble. The Bramble is full of prickes, and crawleth about: the leaves of ſweete bryer on the one ſide are white, on the other blacke; his fruite is the blacke berry, full of iuyce, the berry is dry, colde, and cloſe. His fruit, leaves, or ſprouts quench inward heate. The top of his leaves ſod in Wine ſtay the bloudie flixe, helpe ulcers of the mouth, and faſten looſe teeth.

The nature of it.

Gooſeberries. *Poterion, uva criſpa*, Gooſeberries is full of boughs, hath aſh coloured barke or white, full of ſharpe thornes, his leaves are leſſe than ground Ivie and crooked, his berries from greene turne to reddiſh: it is cold in the firſt, dry in the ſecond degree; his greene leaves cure inflammations, and apoſtumes, and aſſwage *Ignis ſacer*.

The nature of it.

Colutea. Colutea in leafe not unlike to Fengreke, hath a round fruit, as big as a Lentle in a puffed ſhell. It is hot in the beginning of the ſecond degree, and dry in the

The nature of it.

 firſt:

The nature of it. first: it purgeth the panch: scoureth away chiefly melancholy, without trouble, from the head, braine, and the Instruments of the senses.

Thus farre of Plants growing from a trunke or stalke, &c.

Herbes. Now follow Herbes which have but a thin small stalke, consisting most upon leaves: These doe nourish more or lesse, as Corne and Pot-herbes, which nourish more.

Wheate. Wheate is a kinde of Corne, having an eare upon

The nature of it. the blade, stuffed with many graynes; it is moderately hot and dry, and of much nourishment, and helpefull for many diseases, aswell within as without the body: the best is hard to breake, heavie, and of gold colour, smooth, and groweth in fat ground.

Leaven of Wheate doth draw, ripen, and open ulcers, and apostumes: Bisket profitteth against rheume.

Barley. Barly is cold and dry in the second degree, and

The nature of it. purgeth. His floure and new milke in plaster cure Biles, and such tumors, by easing their paine, and drawing forth heate. Bread made of it begetteth cold and slimie humours, and nourisheth lesse than wheat, Barley water maketh the skin faire and smooth.

Spelte. Spelte or Zea is of a middle temperature, betweene Wheate and Barly: it is a kinde of Wheate, and commonly goeth under that name.

Rye. Rye is not so hot as Wheate, and hurteth much, except it be well disgested.

Oates. Oates are colder than Wheate, and of operation almost like Barley.

Now follow of Pulse:

Millet. Millet is a most fertile Pulse with sharpe leaves, broad below

The nature of it. below, and sharpe towardes the toppe: his cod hath in it a round long fruit. It is cold in the first, and dry in the third degree: It stoppeth the belly, and nourisheth but little.

Rize. Rize is smaller than Millet, and farre lesse, it groweth in moyst and watry places: it bindeth.

Lentels. Lentells grow like small pease, and have a vertue to binde.

Pease. Pease are either of the field or garden; bearing a white, or a purple flower.

Beanes. Beanes are meanely colde, and moyst, inflaming, windie, hard to disgest.

Pot herbes. Now follow Pot-herbes.

Coleworts. Coleworts haue very broad leaves, which enclosing

Their natures. one another round about become Cabbedges. These be colde and moyst; and in Egypt be very bitter. The Romanes for the space of six hundred yeares used this onely herbe to cure all diseases. His broath expelleth the stone and gravell, his leaves applyed by themselves, or with the flowers cure inflamations; his juyce healeth festred sores, it cureth the falling of the haire. Broath made of his leaves with an olde Cocke, cureth the Collicke, and other gripings.

Spinagh. Spinagh hath an high stalke, and beareth sharpe

The nature of it. seedes, his leaves being sharpe and triangular; it is colde and moyst in the first degree. His juyce expelleth hurtfull rheume: It mollifieth the belly, and cureth hardnesse of the backe and belly. His luyce taketh away the paine and heate of the stomacke and liver: it helpeth the byting of Spiders,

Lettise. Lettise hath his leaves gathered into a curled roundnesse; that which groweth in the field hath a shorter

ſtalke and leafe than Garden Lettiſe, being bitter, and full of milke.

The nature of it. It is moderately moyſt and colde, like Spring water, it is wholſome in Summer, to reſtore appetite to meate. Yet too much of it hurteth the eyes: and boyld with womans milke cureth burnings.

Beetes. Beetes have two colours, the one white, the other blacke and red, both of them for their ſalt diſgeſt and cleanſe, but the white is more ſalt, and bindeth, yet being boyled, it looſeneth: It cureth obſtructions of the liver, eſpecially if it be taken with vineger and muſtard: It alſo cureth thoſe that be ſicke of the ſplene.

The nature of it.

Purſlaine. Purſlaine hath round, thicke, fat, and white leaves on the backe, a red ſtalke, yellow flowers like a Starre: They of the Garden have broad leaves, and a thicke ſtalke: the wilde, leſſer, and more leaves. It is colde in the firſt, and moyſt in the ſecond degree: it is tart; his juyce helpeth a hot ſtomacke, and hot diſeaſes; it being ſomewhat binding, helpeth fluxes, and evacuations of bloud, if it be uſed with Barly flower.

The nature of it.

Mallowes. Garden Mallowes grow with a round leafe, and high ſtalke, his flowers be red, or white: wilde Mallowes mollifie, and a little diſgeſt: Garden, are moyſt, and weaker. The decoction of Mallowes drunke, cureth on old cough: his leaves ſod and uſed with common oyle heale burning.

The nature of it.

Onion. The Onion hath a ſubtile ſtalke, round and hollow, ariſing from a round roote, wound about with many fouldings: it is hot almoſt in the fourth degree: it is of thicke partes: his juyce is a dry ſubſtance, and hot. An Onion all night layd in cold water and drunke, killeth wormes, and being beaten with ſalt, it draweth away

away warts by the rootes: his juyce put in the eare cureth deafeneſſe.

Leekes. The Leeke groweth almoſt like Onions, and is of the ſame qualitie, it doth diſſolve ſwellings, and congealed bloud, being applyed like a Plaſter.

The nature of it.

Parſley. Parſley hath leaves like Cicuta; it is hot and dry in the third degree, it peirceth and diſſolueth, provoking urine; the ſeede is more effectuall than the herbe. It diſſolveth the ſtone, it conſumeth ill moyſture, and ſores of the head.

The nature of it.

These hearbes following are uſed for Garlands, or phyſicke; ſome of them ſmelling ſweetly.

Violet. The Violet hath leaves leſſer and thinner than Ivie, but more blacke; his ſtalke commeth from the midſt of his roote, beareth a purple flower, and a ſeed full of graynes. It ſpringeth in woods, and ſhadowie places, wilde, but not ſweete: it is cold in the firſt, and moyſt in the ſecond: and cooleth hot diſeaſes and inflammations. Of it there be divers kindes, and colours: as the Pancey or Harts-eaſe.

The nature of it.

Dayſie. The Daiſie hath leaves ſomewhat round above and ſmall below, aud the roote in the ground wheeling about: it is cold in the ſecond degree.

The nature of it.

Jelly-Flower. The Jelly-flower hath ſharpe leaves, growing like graſſe with flowers of ſundry colours: it hath an attractive force, and the juyce healeth wounds in the head.

The nature of it.

Maioram. Maioram hath almoſt a woodden ſtalke, with many rough round leaves, and it ſmelleth ſweetly. It is hot and dry in the fourth degree, it is of thin parts, and of a diſgeſting faculty. It healeth, diſgeſteth, and prouoketh vrine.

The nature of it.

Roſemary. Roſemary is hot and dry in the third degree, and
The nature of it. ſmelleth like Frankincenſe. It mollifieth, diſgeſteth, and dryeth.

Spicknard. Spicknard is hot in the firſt, and dry in the ſecond de-
The nature of it. gree.

Lavender. Lavender heateth and dryeth in the ſecond degree.

Daffodill. White Daffodill is hot and dry. It is of diverſe kindes.

Roſe Campion. Roſe Campion is an hearbe with an Aſh coloured ſtalke, as it were cotton, long leaved, and white, bearing purple flowers, growing up like the Prim-roſe: his ſeede is hot and dry almoſt in the ſecond degree: it prevaileth againſt the ſtinging of Scorpions.

The nature of it.

Herbes uſed in medicine, are Aromatike, or ordinary. Aromaticke doe comfort and ſtrengthen the ſpirits. Thence they take their name.

Saffron. Saffron is hot in the ſecond, and dry in the firſt de-
The nature of it. gree: it a little bindeth, and concocteth; it may with good keeping be preſerved five yeares.

It comforteth the heart and ſtomacke, it maketh pure bloud, and provoketh vrine, it ſcowreth the breſt, it is deadly, if it be taken too much.

Ginger. Ginger waxeth greene twiſe or thriſe in the yeare,
The nature of it. it heateth in the third, and is moyſt in the firſt, it is of more ſubtile parts than Pepper.

Wormeſeede. Zadury or Wormeſeede heateth and dryeth in the
The nature of it. ſecond degree, it is that we doe call the roote of China, like Ginger but not ſo biting.

Gallingall. Gallingall is the roote of a plant growing in Memphis and Syria, it groweth like the flouredeluce, but
The nature of it. with prickes, and is broader and thicker from the roote. It is hot and dry in the third degree, as is the roote of Cyprus. Calamus

Calamus Aromaticus is an hearbe of India, growing like reeds or figs. It is hot and dry in the ſecond degree, and a little binding. Calamus Aromaticus. The nature of it.

Acorus is a plant growing with leaves like Iris, but ſmaller, or like ſegges; the roote is white, ſweetly ſmelling. It is hot and dry in the ſecond degree. Acorus. The nature of it.

There be ſexes of hearbes, as of other living things, ſome of which more helpe, namely, the Male or Female according to their kindes.

Chap. VIII.

Of humane Creatures.

What man is, and the manner of his generation.

MAn is a creature that hath reaſon, & as he is moſt excellent, ſo hath he a more perfect ſhape in body than others. His members are formed, and beginne to appeare diſtinctly about the ſix and twentieth day. And they are all perfect in Males at thirty dayes, and in Females at 36. dayes. About this time the Childe beginneth to live, and to feele. The Male is moved in the third Month, but the Female in the fourth Month: then it is nouriſhed and increaſed till the ninth Month, and after the ninth Month, when it is growne great, it is brought forth. This is the forming, and procreating of Man, for whoſe ſake all other creatures were made.

What a feeling ſoule is.

A feeling ſoule is a power apprehending and perceiving things placed without the body of living creatures. This facultie is exerciſed by the ſences, and by motion accompanying the ſences. The ſences are outward or inward. The outward onely perceiving things preſent: And every one of theſe have

Sences outward.

their

their proper subject: and the most have a middle instrument; of all which, if there bee a certaine mutuall consent and just proportion: the sences become of more force: but if any one of them have too excellent an object, or his instrument bee corrupt, they are dull and unfit to be used; This is the cause of blindnesse to those that walke in snow, and of deafenesse unto Smithes, &c. Furthermore, sences are common to the whole body, or proper to some part thereof. The Touching. sence in the whole body is touching. This is a sence by meanes of flesh, full of sinewes, apprehending tactill qualities.

His instrument is flesh, full of sinewes, or rather a nerve like a hayre disperſed throughout the whole body. In man for the abundance of nerves is this sence most quicke; his meanes is flesh and skin, for though the skinne be removed, yet a man feeleth hurt. Sences of certaine parts are more or lesse noble. The nobler Geeing. are Seeing, and Hearing; whose meanes are the water, and ayre: Sight by the eye perceiveth bright and coloured things: The subject thereof is light, &c. Greene a most temperate colour is most acceptable to the sight. His instrument is the nerve Opticke, which from the braine commeth to the eyes.

Hearing. Hearing is a sence perceiving soundes; his instrument is a little skin in the lowest winding, or turning of the eare, dry and full of holes: the skin is double, one below, which covereth a little bone like an Anvile: another above, containing a little bone, as it were a small Mallet. The upper striken by the soundes, striketh the lower, and stirreth up the spirits in the nerves to perceive the sound.

The

The more un-noble sences are Tasting, and Smel- Tasting. ling: Tasting apprehendeth tastes. His instrument is a nerve stretched like a Net upon the flesh of the tong, which is full of little pores. His meanes is a temperate salt humour, which if it doe exceed the just quantitie, it doth not exactly perceive tastes: but if it be altogether consumed, no tastes are perceived.

Smelling judgeth qualities fit for smell: his instru- Smelling. ment is the entrance into the first ventricle covered with a small skin; the dryer it is the quicker of smell, as in Dogs and Vultures: but man for the moystnesse of his braine, hath but a dull smell.

Now follow the inward sences, which beside things Sences in- presently offered, doe know formes of many absent ward. things. By these the creature doth not onely perceive, but also understandeth that which hee doth perceive. These have their seate in the braine: They are either conceiving or preserving: Conceiving exerciseth his Conceiving. facultie by discerning, or more fully judging: it is called, Common sence, and the other is Phantasie. Common sence more fully distinguisheth sensible things; his instrument is the former ventricle of the braine, made by drynesse fit to receive. Phantasie is an inward sence more diligently examining the forms of things: This is the thought and judgement of creatures, his place is the middle part of the braine, being through drynesse apt to retaine.

The preserving sence is Memory, which according Preserving. to the constitution of the braine is better or worse. It is weaker in a moyst braine than in the dry braine. His instrument is the hinder part of the braine.

Memorie calling backe images preserved in former

time, is called Remembrance: but this is not without the use of reason, and therefore is onely attributed to man.

The wittie excell in remembrance, the dull in memorie.

Sleepe how caused.

Sleepe is the resting of the feeling faculties: his cause is a cooling of the brayne by a pleasant abounding vapour, breathing forth of the stomacke, and ascending to the braine. When that vapour is concoct, and turned into spirits, the heate returneth, and the sences recovering their former function, cause waking. There be certaine appointed courses for watch and sleepe, lest creatures languish with overmuch motion.

Waking how caused.

Dreames.

Affections of sleepe are Dreames, Night-mare, and Extasie, &c.

What they be.

A dreame is an inward act of the minde, the bodie sleeping: and the quieter that sleepe is, the easier bee dreames: but if sleepe bee unquiet, then the minde is troubled.

Their variety.

Varietie of dreames is according to the divers constitution of the body.

The cleare and pleasant dreames are when the spirits of the braine, which the soule useth to imagine with, are most pure and thin, as towardes morning when concoction is perfected.

But troublesome dreames are when the spirits bee thicke and unpure. All naturall dreames are by images, either before proffered to memorie, or conceived by temperature alone, or by some influence from the starres, as some thinke.

From dreames many things may be collected, touching the constitution of the body.

The

The Night-mare, is a seeming of being choked or strangled by one leaping upon him: feare following this compression, the voyce is taken away. This affection commeth when the vitall spirits in the braine are darkened by vapours, ascending from melancholy and phlegme, insomuch, that that facultie being oppressed, some heavie thing seemeth to bee layd upon us.

The night-mare.

How occasioned.

Therefore this disease is familiar to those, who through age or sexe are much inclined unto these humours.

An Extasie or traunce, is a vehement imagination of the departure (for a time) of the soule from the bodie. A deepe sleepe lasting some dayes ensueth, for the soule giving over it selfe to cogitation, ceaseth to serve the body. Wherefore men wanting motion and sence seeme to be dead. And with what humours the braine shall be compassed, such phansies doth it conceive, although sometime spirits working on such phatasies, imprint other things.

A trance.

What it is.

Now followeth Motion, which accompanieth sence, and is caused either by appetite, or change of place; for we desiring things perceived in sence, cannot attaine unto them withour moving our body to that thing.

Appetite is a facultie desiring such things as are objects to our sense. It chiefly followeth touching, or thinking. Delight followeth touching. Delight is a desire of an agreeing Object. Griefe is his contrary, which is a turning from the hurtfull object, or from that we count unpleasant. Appetites following cogitation, are all the motions of the hearr, which be called

Appetite: What it is.

affections, and are either good or bad. The good cherish and preserve the nature of our sensitive facultie, as mirth, love, hope, which come of heate: when the heart dilating it selfe, desireth to enjoy the thing, with which it is delighted.

Motion what it is. Motion is a facultie of living creatures, stirring a bodie, entised by appetite from one place to another. It is either of the whole body, or of partes: Of the whole body, as by going, &c. Of partes, as breathing, which is made either by enlarging of the parts, which serve for the taking in of the ayre, or by the closing of them for the expelling of corrupt ayre.

Of the bodies of living creatures. Now followeth to intreat, Of the bodies of living creatures.

What the matter of the body is. The matter of the body in which the foresaid faculties be, is the seede of both sexes. Seede is most pure bloud, perfectly concocted in the testicles, and it is gathered from the whole bodie. For the testicles lacking nourishment, draw bloud from the hollow veyne and change it.

Conception, what it is. Conception is the action of the wombe, by which the power is stirred up to execute his inbred gift. Then that power being stirred up doth diversly distract the matter, separating his divers partes: and thus all parts alike get together their shape. Likewise all of them together are adorned with the faculties of the vegetative, or sensitive soule. Amongst the naturall faculties of the partes of the body, if there be putrifaction, a fault of the concocting facultie, there is made a certaine generation of matter: This is naturall, or extraordinary.

Naturall. Naturall is by an inbred heate, not altogether subdued,

dued, but slackly exercising force, through disposition of the mattter. Such is to be seene in inflamations, botches, and impostumes. For in these, nature so farre as it can, laboureth to bring this his subject matter to the best forme. Therefore such suppuration is wont to argue a certaine strength of nature, wherefore often with convenient helpes, it is carefully encreased. In this kinde, especially is praysed white, thicke, smooth, equall, and least smelling matter.

Extraordinary. Extraordinary mattering is, when nature altogether subdued, the humors or parts themselves are made full of corrupt matter through store of rottennesse.

But nature, or the concocting facultie, is overcome either through proper weakenesse, or by corrupt matter: this is observed in all rotten, malignant, and stinking botches, in which according to the diverse fashioning of abounding matter, are found diverse sorts of solid bodyes, as haires, and such other like.

Of the parts of the body. Of partes of the body which appertaine to the making up of the whole body, some are containing, and some contained. The contained for their fluent nature are sustained by helpe of others: Such are humours and spirits. Humors are moyst partes begot of the first mixture of nourishment in the liver. These are in the seede of creatures, and are called the beginning of things endued with bloud. Any of these if they fayle of their proper nature, are not fit to be in the bodie, but are become unnaturall.

Humors. Humours are of the first, & the second sort. The first are hot or colde, and moyst, and dry: Bloud is hot and moyst, and it is a thin, red, humour, and sweete. With this the other partes be chiefly nourished, amongst

Blood.

whom this is the chiefe. The faults of this is in substance, as putrifaction, or mixture of vicious humors: or in qualitie, as too thicke or too thin; or is affected with some other badnesse. The humour that is hot and dry, is choller; this is a thinne, yellow, pale, and bitter humour. His use is to helpe the expelling faculties, and chiefly in the Guts. Gall besides nature, through aduſtion is yellow, like an egges yolke, in the stomacke it is like rustie brasse.

Phlegme. The colde and moyst is phlegme, which is a tough, slimie, and whitish humour, and tastlesse. If this have a fuller concoction, it is turned into bloud. His use is to moysten the joynts. When it declineth from his proper nature, it is salt or tart, according to his mixture. The colde and dry humour is blacke choller. This is a thicke, blackish, tart, bitter humour. It serveth to strengthen the stomacke, that it may more easily retaine, and receive meate. When it declineth from his proper nature by immoderate burning, it hath divers kindes. Humors of the second sort are begotten of the first, being wrought with concoction they are like dew or glew. Dew is a humor contained in the hollownesse of the members, and joyned to their substance, like dew, with which they are nourished.

Glew. Glew is a humour immoderately congealed, and being firmely fastned to the members, beginneth to bee changed unto their substance, of which change it is called *Cambium*, and *carniformis*, like the flesh.

Spirits. Now follow the spirits, which are a fluent part of the body, most thin, and begotten of the bloud of the heart. The spirits are the chiefe instrument, and as it were the Chariot of the soules faculties, for with most speedie,

speedie, and swift motion, it carrieth them over all the body.

Spirits having roote in the heart, be either absolute or rude, and to be finished in other parts. Vitall spirits be absolute in the heart, and are of a firie nature, and from the heart by arteries are spred in the bodie, by whose communication all parts doe live. Vitall. What they are.

Spirits to be perfected in other parts bee Animall, which from the heart be carried into the braine, and there made subtile by nerves, flowing unto all the other parts; and this is the Chariot of functions or faculties of all living Creatures. Animall. What they are.

Parts containing are more solid, which are sustained by themselves; all these either are as a stay or covering. The stay to other parts, is either bone, or gristle. Bone is the hardest and dryest part, and stay to all the bodie. Bones are knit together by ligaments, which are like hard and thicke threeds, being as bandes to the bones of the bodie.

Gristles are somewhat softer than the bones, and sustaine all other partes. The covering of the other parts, is the skin, which is tender without bloud, and covereth the whole body. The membrane is a tender skin, covering some parts. Gristles. What they are.

There is yet in these parts a common excrement of concoction, which is sweat, and is a moystnesse of the veynes, expelled by secret pores; of this is to be seene a diverse colour, according to the die of the moystnesse, or matter thereof: the usuall is watrish, through the white substance of the channels, through which it runneth. But if the pores be large and open, that without delay, and long change it may slide through them: Sweat. What it is.

them: eſpecially, if for ſome affection of minde or diſeaſe, it become thinner, then is it ſpeedily expelled, and tainted with ſome other colour, &c. Therefore from the colour of ſweate, the bodyes conſtitution may be knowne. Colde ſweate is worſe to bee liked than hot, but either is bad if they be unequall.

Alſo the containing parts afore-named are animall, or vitall, and each of theſe are more, or leſſe principall. Animall parts are, in which the animall parts are moſt exerciſed, as ſence and motion together, or alone. The chiefe member of motion and ſence, is the braine contained in the head; whoſe ſubſtance being hurt, it is in danger to loſe both ſence and motion.

Braine, what it is.

The Braine is ſofter than the other parts, white, and covered with a double skinne cloſely. The skinne of the brayne is either called *Pia*, or *Dura mater*. The ſcalpe is a thicke bone, covering the whole head, and hath up on it a skin with hayres. The ſcalpe is diſtinguiſhed with certaine ſeames in certaine parts, which are true or fayned, &c.

Excrements of the braine.

The excrements of the braine are either thicke or thin: The thin are teares burſting from the braine by the angles of the eyes. The greater the fleſh of thoſe angles be, ſo much more plentifull be teares, chiefly if the complexion bee colde and moyſt, as of women. Teares be cauſed by heate which openeth, or colde which preſſeth the fleſh, and cauſeth teares.

The thicker excrements which are expelled from the brayne, eyther are by the eares or noſe.

Of the eares.

In the eares is a moyſt excrement of the brayne, gathering and rotting in their hollowneſſe.

Of the noſe.

That of the noſe is a thicker excrement than that of the

the braine: which although it be like flegme, yet it is altogether of another nature. The pithe of the backe bone is neare to the nature of the braines excrement, ſave that it is harder and ſomething hotter. The backe is bonie, round, and in his length hath twentie foure joynts. The Nerves are leſſe principall parts of ſence and motion, which if they be out of order, the parts in which theſe be, become unfit to move. Nerves or ſinewes are thin parts, round, &c. white, much like to thicke threeds. Some are ſofter, ſome harder. The ſofter are of more uſe, of which are ſix paire, by two and two, from the braine arriving to other parts.

Firſt, to the eyes. Secondly, To moove the eyes. Thirdly, to the tongue and taſte. Fourthly, to the pallet and skin of the mouth. Fiftly, to the hearing. The ſixt, to the mouth of the ſtomacke, by which ſence and motion deſcend.

Hard Nerves have a duller faculty, and leſſe ſerving to the ſenſes, of which are thirtie paire, which by couples come from the marrow of the backe bone: by whoſe conduct the backe eaſily executeth his faculties.

Of the parts to breath.

The breathing parts.

The principall parts of breathing are in the breſt: being either Lightes or Heart; wherefore theſe being touched, breathing is immediately hurt, and ſuch wounds be deadly. The Longes are a ſpongious and thin part, ſoft, and like foame of congealed bloud, declining ſomething to the right ſide. Breath is brought unto the Lightes by a rough Artery, knit to the roote of the tongue. This Arterie is a long channell made of many griſtle rings on a row, which endeth in the

Lights. If any thing fall into the hollowth esse of this, the breath is hindred, and there is danger to be choaked.

The heart, what it is. The Heart is a fleshie part, solid, and well compacted, almost like a Pyramis: it hath two ventricles, the right and the left. The right by an arteriall veine communicateth bloud to the Lights. This veine is so called of a proper substance and office. From the left ventricle of the Heart ariseth Aorta the roote of all the Arteries. These are hollow vessells in the Heart begotte: and are thicke, distributing spirits throughout the whole bodie.

Spittle, what it is. The excrements of the principall parts of breathing be spittle and cough. Spittle is a windie foame cast out of the brest, and his parts: If it be avoyded with noyse, it is called coughing. Superfluitie of this matter is judged by the colour, for red spittle is of bloud, yellow of choler: white of flegme, and blacke of melancholy.

Midriffe, what it is. The lesse principall parts of breathing, are the midriffe, and the mediastin. The midriffe is a thinne skin, like perchment, fastened overthwart to the sides, and includeth the parts of the brest, The mediastin is a double skinne in length, dividing the brest into two sides.

The vitall parts are those which serve to the preservation of the spirits of living creatures, and are appoynted to nourishment, or generation. The principall parts for the perfection of nourishment be the stomacke and the Liver.

Stomacke, what it is. The Stomacke is a part like perchment, sticking to the throat, round, but long, and as it were, twisted with

with many small threeds, and it is the kitchin of nourishment to be concocted.

Throat, what it is. The throat is a channell, full of nerves, carrying meate from the mouth to the stomacke. The Fibres are as it were, very small threeds, by benefit whereof the stomacke enjoyeth her facultie. These if they bee straight and right, draw nourishment unto them: if crooked, they are oblique or transverse: those retaine nourishment received: these expell excrements.

Vomiting. The casting forth of excrements by the upper parts of the stomacke, is called vomit, which expelleth that which aboundeth in the stomacke: yet such excrement is many times sent backe from other parts into the stomacke. The Liver lyeth upon the stomacke on the right side, enclosing it with his laps, and is a fleshy part of nourishment, red, like congealed bloud, placed next unto the Midriffe. In the Liver is made the second concoction, namely, of nourishment in the belly, turned into a red masse: from the Liver ariseth a hollow veine, the roote of all other veynes. These are hollow parts, round, and guide the bloud unto all the body; the substance of these is thinner by sixe folde than the skin of the Arteries, whose substance ought to be thicker for the vehement motion of the spirits. That the office of the Liver may be made perfect by meanes of veynes, other particles are allotted thereunto: which receive the abounding humors, choller, &c. The Gall receiveth yellow choller, and the Milt blacke. The bladder of the Gall is a slimie part in the hollow part of the Liver, of the figure of a Peare: the Milt is a long part like a shooe-sole, on the left side over against the Liver, but somewhat lower. Water from the Liver is

The Liver.

received by the reines and bladder. The ſubſtance of the reines is thicke, and ſolid fleſh; they ſticke on both ſides about the loynes, and have emulgent veynes ariſing from the hollow veine. From the trench of the veynes hang downeward white, narrow veynes, guiding water from the reines unto the bladder. The bladder is a ſlimie part, round, and containing urine in it.

Vrine. Vrine is a whey ſeparated from bloud in the reines, and more fully purged in the bladder. This in the bodie of a temperate man, and ſound, is of a meane ſubſtance, and in quantitie anſwereth the drinke received: in the chollerike it is yellow, or red. His ſediment is white, ſmooth, and equall without bubbles, &c.

How to diſcerne a ſound body by it. A ſound body is knowne by voyding vrine, which in the morning is white, and after ſomething red. For the one ſignifieth that it doth, and the other that it hath concocted. Vrine is of a meane ſubſtance betwixt thin and thicke. Thin vrine argueth the weakeneſſe of the body, and coldneſſe predominant, and rawneſſe of the parts of concoction. And this either remaineth the ſame or becommeth troubled. That ſheweth concoction is not yet begunne, and therefore raw, or This, that it is but new begunne. Thicke vrine like that of beaſts, noteth exceſſe of matter or concoction. Vrine doth varie according to age or complexion, or according to dyet and affections of the minde. For the vrine of Infants for the moſt part is white and milkie, the vrine of boyes is thicker, and not ſo white, the vrine of young men is like golde, and of olde men white and thin.

Complexions. Touching complexions, the chollerick have Orange colour:

colour: Phlegmatike pale, and thicke: the Sanguine, red and meane. The melancholike, wan and thin.

Dyet. Dyet changeth vrine, as Saffron or Caſſia cauſeth Orange colour. Vrine of thoſe that faſt long is yellow, of thoſe that eate too much, it is white.

Guts. The leſſe principall parts of concoction, are the gutts and meſenterion. The gutts are long, round, hollow, and are knit to the lower part of the ſtomacke. Theſe are thicke or thin. The thinner are the three uppermoſt, as *Duodenum*, *Iejunum*, and *Ileos*.

Their ſeverall kinds. *Duodenum* is the uppermoſt gut, twelue fingers long. The *Iejunum* beginneth where the *Duodenum* beginneth to turne unto rundells. *Ileos* is a thin gut, having inwrapped windings. The thicker guts of a thicker skin, are *Cæcum*, *Colon*, and *Rectum*.

The blinde gut is thicke, large, and ſhort, having but one mouth. The *Colon* hath many turnings. The right goeth ſtraight to the *Tuell*: The excrement of the belly, if it be but ſoftly compact, and made at the appointed time, and ſomewhat yellow, and not much ſmelling, argueth good concoction. If it be red, it argueth, that much colour floweth in the ſtomacke: if it be white, it ſheweth cruditie and want of choller.

Blew ſheweth mortification, and cold of the inward parts. Too thicke or thin egeſtion, argueth bad concoction: if fattiſh, or ſlimie, it noteth a conſumption. Above all, in theſe things it muſt bee obſerved, what meate hath lately beene received.

How placed in the body. The guts are wrapped about with the Meſenterion, which is a skin in the end full of kernells, and woven with many thin veines, which meeting together, make a multiplying of *Vena porta* in the hollow of the Liver.

Thus of the common parts of all creatures: their kindes follow.

The diſtinction of living creatures, and their ſeverall kinds.

All Creatures are reaſonable, or unreaſonable. They which want reaſon, are Beaſts, who live on Land or in Water. Thoſe which live on the earth, moove on the earth, or in the ayre. Beaſts moving on the earth, are fourefooted, or creeping. Fourefooted Beaſts, bring forth young ſhaped as themſelves, or eggs. Thoſe that bring forth living Creatures, ſome have ſolide feete, and ſome cloven feete. They have ſolide feete who want hornes, as Horſes, Mules, and Aſſes, &c. The cloven footed Beaſtes, for the moſt part have hornes, as the Oxe, Goate, Hart, &c.

Land Beaſts bringing forth eggs, are the Crocodiles, and ſome which have a ſhell.

Frogges, Liſerts, and ſome Serpents have foure feete.

Creatures creeping on the earth, are all kinde of Wormes, Ants, Earwigs: to whom may bee added, Spiders, Lice, Gnatts, and ſuch other.

Fowles are hotter and dryer than Creatures living onely on the land, and all of them bring forth egges, and have but two feete. They have either whole feete or clawes. Geeſe, Duckes, Swannes, have whole feete to rowe in the water.

Other Birds for the moſt part have clawes, as Doves, Swallowes, Hennes, Sparrowes, &c.

The inſect of Fowles, are Waſpes, Bees, Hornetts, Gnatts, Flies. Theſe Creatures are they which live upon the earth: thoſe that live in the water, are Fiſhes, or of that kinde, as the Sea-Horſe, the Sea-Dog, &c.

Fiſhes many of them are like to Creatures living on the

the earth in their parts: but they have not ſo much bloud: therefore they are colder and moyſter.

Fiſhes are ſoft, or hard: the ſoft have ſcales, or onely a skin.

Of the ſcalie be the Carpe, the Pearch. Of the ſlimie be Eeles.

The harder fiſhes have plates, as the Crabbe, the Lobſter, &c. Or ſhells, as Oyſters, Muſſells, &c.

FJNJS.